













AN  
ACCOUNT  
OF THE  
TRIGONOMETRICAL SURVEY,  
CARRIED ON BY ORDER OF THE  
MASTER-GENERAL OF HIS MAJESTY'S ORDNANCE,  
IN THE YEARS  
1800, 1801, 1803, 1804, 1805, 1806, 1807, 1808, AND 1809.

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## P R E F A C E.

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IN the year 1800 a paper was presented to the public, through the medium of the Philosophical Transactions, giving an account of the Trigonometrical operations performed in 1797, 1798, and 1799. Before we enter on the particulars composing the body of the following work, it will be proper to take a short view of the state of this undertaking at different periods since the commencement of it, in the year 1791, to the state of it in the year 1799.

The first communication on the subject of this Survey was made to the Royal Society, and printed in their volume for 1795. In that account is given a detail of the whole of the operations previously performed for effectuating the initial parts of the Survey. These principally consisted of the measurements of the base lines on Hounslow Heath and Romney Marsh, joining the triangles proceeding from the former, to those of the late Major General Roy, at Fairlight Down; and intermediately at other stations, and measuring a base of verification on Salisbury Plain.

The second paper is found in the Philosophical Transactions for the year 1797. This contains the triangles carried on in the two previous years, from the base line on Salisbury Plain,

towards the west, and along the southern coast as far as the Land's End. It also gives an account, with all the particulars, of a Survey, carried on in Kent, with a new circular instrument of less dimension than those of the large theodolite, but of similar construction.

The third paper made its appearance in 1800, detailing the operations of 1797, 1798, and 1799. From this it will appear, that since the publication of the former account, the great triangles had been carried on northward as far as Bristol and Oxford; and also that a minute Survey of Essex had been made. Particulars of the measurement of a base line on Sedgemoor were also given, that base line being the fourth measured since the commencement of the Survey. . .

The fourth, and last communication to the Royal Society, was made in the year 1803. It consisted chiefly of an account of the measurement of an arc of the meridian, extending from Dunnose, in the Isle of Wight, to Clifton, in Yorkshire. The triangles necessary for ascertaining the distance between those stations were only given, that paper having been composed, principally, with a view to announce the conclusions derived from that operation.

From this sketch it will appear, that the Trigonometrical operations, from their commencement in 1791 to the present time, are not accounted for beyond those particulars which constitute a Survey of the southern coast, and as much of the interior as lie between it and the parallels of Oxford and Bristol. The present Work contains a large mass of Topographical matter, which, combined with that given in the accounts before published, comprizes the Trigonometrical Survey of almost all England, and the whole of Wales, with a part of Scotland.

The first Section contains the angles observed with the large theodolite, as well as the angles of elevation or depression at the several stations, and also the situations of those stations.

The second Section contains a short account of the measurement of a new base line on Rhuddlan Marsh, near St. Asaph, in North Wales, with the reduction of that base, and the calculation of the sides of the principal triangles. Of these triangles, those first given are made to depend on the side joining the stations Bow Brickhill and Lilleyhoe, and Lilleyhoe and Ledlington, (see the Philosophical Transactions for the year 1800, page 604), extending from thence to the north of Cambridgeshire, the last stations being Littleport in that county, and Brandon Warren, near Brandon, in Suffolk.

The triangles running up from Arbury Hill to Clifton Beacon, in Yorkshire, as given in the Philosophical Transactions for 1803, result from observations made immediately after the operations in Cambridgeshire ceased. Other triangles, also resulting from observations made in the same season, and uniting with the former on the eastern side, are given in this section. In this series, two stations will be found named Cropwell Bishop and Bottesford. These were chosen to connect the triangles with the extremities of a base-line then intended to be measured, but since relinquished, Misterton Carr, in the north of Lincolnshire, proving to be a more proper spot for that operation: however, the triangles depending on these stations are given, many churches and objects of note having been observed from them, and their situations thereby ascertained. The junction between the triangles of this series, and those in Cambridgeshire, is effected by intermediate spires, among which Souldrope is the principal, and the distances—Souldrope Spire from Arbury Hill 146434 feet, from

Lilleyhoe 115863 feet, from Orwell 125908 feet, and from Ely Minster 196695 feet, may be considered as primary.

The triangles next in order, are those which proceed from a base line recently measured on Rhuddlan Marsh, branching off in all directions. A series extends from this base to Anglesea, thence, by Snowdon, down the western coast of Wales, by Cardigan Bay, joining, near Aberystwith, a series of triangles extending over South Wales, and proceeding from the triangles in Gloucestershire, along the borders of the Severn and Bristol Channel, to St. David's Head, and thence up to this just mentioned point of junction. Another series, uniting with the former, proceeds southward from Rhuddlan Marsh, and joins the southern triangles in Glamorganshire, while, from the western side of this series, triangles unite with those in the central part of England. From this new base, triangles branch out towards the east, and unite with those proceeding westward from Misterton Carr, mutually verifying the sides of each series. Triangles are also carried on from this base through Lancashire, Cumberland, and Westmoreland, into Scotland, and uniting with another series, extending from Clifton Beacon, through Yorkshire and Northumberland, and the east part of Scotland, as far as the northern side of the Firth of Forth.

On examination, the triangles in this section will appear to have had only two angles observed in some cases. Had it been practicable, the instrument would, as heretofore, have been always taken to the third station; but the peculiar character of the country, where this omission has had place, prevented the performance of that measure. This, however, cannot, but in a very trifling degree, have affected the accuracy of the conclusions, as the proofs on the sides of several triangles so circum-

stanced, plainly shew. With an instrument, so excellent as that used in this Survey, except for the purpose of intersecting surrounding objects, it is, perhaps, not necessary tenaciously to adhere to the practice of observing the third angle of every triangle. The computed length of the base line on Rhuddlan Marsh, derived from the base on Hounslow Heath, differs only one foot from the length obtained by actual measurement; and the base on Misterton Carr, used in the series of triangles connecting it with Rhuddlan Marsh, gives a result equally consistent. . . .

Section Third, contains the secondary triangles formed by the intersection of church steeples, and other remarkable objects, from the principal stations, amounting in number to six hundred and fourteen. Several of these are supplementary, or *proof* triangles, inserted for the purpose of evincing that, under those circumstances, the intersected objects are properly identified. The number of triangles in this Section might have been greatly increased, if scrupulous attention had not been paid to select intersections not likely to be erroneous.

The Fourth Section contains the triangles, principal and secondary, for the survey of the western counties. The first class of secondary triangles, under the head of this Section, proceeds from the side joining the station on the Quantock range of hills and Moorlynch, and is extended over a large part of Somersetshire, and the eastern part of Devon. The angles of these triangles were observed with the same care as those of the great triangles, staffs being generally erected over the stations. The large and small circular instruments were employed, the former when the station was on the ground, and the latter when observations were made from a tower.



The triangles next in succession, are those constituted for the Survey of the north of Devon. It must be remembered that, when the Survey was formerly carried on in the southern part of this county, the triangles could not be ran up to the northern parts from the intervention of Dartmoor. The triangles now in view, partly depend on the old sides in the east of Cornwall and partly on those in the north-west of Somersetshire.

The next class contains, the triangles for the Survey of Dartmoor and the south of Devon. These originate from the sides of the great triangles heretofore published in the Philosophical Transactions.

These articles are followed by the interior triangles constituted by the intersections of objects from the several stations previously mentioned, comprehending almost every steeple in the west of Somersetshire, all Devon, and the greatest part of Cornwall. To these are subjoined, first, the triangles for the Survey of Dorsetshire; secondly, for the Survey of Hampshire, part of Somersetshire, and part of Wiltshire; thirdly, for the Survey of the county of Sussex; fourthly, for the Survey of part of Surrey; fifthly, for the Survey of Middlesex and Hertfordshire; sixthly, for the Survey of part of Surrey and part of Berkshire; seventhly, for the Survey of part of South-Wales; eighthly, for the Survey of Cambridgeshire; ninthly, for the Survey of part of Bedfordshire and part of Buckinghamshire. This Section concludes with the particulars relating to the altitudes of the stations, and a general list of those altitudes alphabetically arranged. And here it is to be observed, that the altitudes of the stations enumerated in the former publication on this subject, are again repeated, that all the deductions may be brought under one point of view.

It may not be improper, on this occasion, to observe that, the contents of this Section have been made subservient to a regular survey, performed by the Royal Military Surveyors, so that no doubt can be reasonably entertained of the Section being free from errors in bearings, or the identity of the consecutive intersections being certain.

Section the fifth, contains the reduction of the observations made on certain stars with the zenith sector, at Delamere Forest and Burleigh Moor, at the beginning of the year 1806. These observations thus reduced, combined with those formerly made on the same stars at Dunnose in the Isle of Wight gave  $3^{\circ} 57' 13''$ , 1 and  $2^{\circ} 36' 12''$ , 2 for the amplitudes of the arcs respectively subtended by those stations and the one just mentioned.

The bearings of the stations connecting Burleigh Moor and Dunnose, and also the bearings of the stations, connecting Delamere Forest and Black Down, from the parallel to the meridians observed at each extremity of both arcs, are given in this section, from whence it has appeared, after applying the necessary corrections, that 148285,5 feet is the length of the arc intercepted by the parallels of Burleigh Moor and Dunnose, and 925188,5 feet for the meridional arc comprehended by the stations Delamere Forest and Blackdown. The length of the degree of the meridian at the middle point between Dunnose and Burleigh Moor, lat.  $52^{\circ} 34' 45''$ , derived from the data supplied in this article, is 60823 fathoms: the length of a degree at the middle point between Dunnose and Clifton Beacon, latitude  $52^{\circ} 2' 19''$ , as derived from the former measurement, being 60820 fathoms: see the Philosophical Transactions for 1803, page 488. The close of the fifth Section, shows that the substance of the arc on the meridian of Delamere Forest, reaching

from that station to Black Down in Dorsetshire, both in the heavens and on the earth, are consistent, or nearly so, with the celestial and terrestrial contents of the arcs between Burleigh Moor and Dunnose, the computed and observed difference of latitude between Dunnose and Delamere Forest, agreeing within a second.

The sixth Section contains the bearings and distances of the stations from the parallels to their respective meridians and perpendiculars, with the longitudes and latitudes deduced therefrom. The meridians to which the several stations have been so referred, are those passing through Greenwich, Clifton Beacon, Burleigh Moor, Delamere Forest, Moel Rhyddlad in Anglesea, and Blackdown. The directions of the meridians at these stations, have been observed at different periods in a careful manner, and the stations in the vicinity of each, have been referred to its respective meridian, and those midway between two meridians, have been referred to both.

The latitudes of Clifton Beacon, Burleigh Moor, and Delamere Forest are given as deduced from the observations made with the zenith sector at those stations, combined with the observation formerly made at Dunnose and Greenwich, taking  $51^{\circ} 28' 40''$  as the latitude of the latter. The latitude of Moel Rhyddlad has been found from that of Delamere Forest by computation. This section also contains the latitudes and longitudes (derived from the bearings and distances) of the most important places found in the secondary triangles given in the third and fourth Sections: like the principal stations, these have been referred to the nearest primary meridians.

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# ACCOUNT OF A TRIGONOMETRICAL SURVEY.

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## SECTION FIRST.

ARTICLE I. *Angles of the great Triangles observed in the Years 1800, 1801, 1803, 1804, 1805, 1806, 1807, 1808, and 1809.*

### *At Arbury Hill.*

Between				Mean.
Corley and Helkinton	-	71	0	.5,75 } 6,5
				7,5 }
Burrow Hill and Helkinton		27	3	31,25
Bardon Hill and Helkinton		36	45	28
				34
				34,75 } 31,75
				30,75
Epwell and Helkinton	-	160	57	10,75 } 12,25
				12 }
				13 }
				13,5 }

### *At Burrow Hill.*

Arbury Hill and Helkinton	-	143	13	50,5 } 51,25
				52 }

### *At Helkinton.*

Bardon Hill and Arbury Hill	-	125	30	7 } 8
				9 }
Bardon Hill and Tilton	-	50	10	48,75 } 46,5
				47,75 }
				43,5 }
Naseby and Arbury Hill	-	139	9	20
Tilton and Arbury Hill	-	175	40	50,75 } 57,25
				55,75 }
				59 }

*The Account of a*

Between

				Mean.
Bardon Hill and Naseby	-	-	95 20 23	} 22,5
			21,25	
			24	

*At Naseby.*

Helkinton and Tilton	-	-	125 48 3,75	} 4,5
			5,25	

*At Tilton on the Hill.*

Beacon Hill and Stathern Point	-		74 51 58,75	} 59,25
			58,25	
			59,75	
			59,75	

Bardon Hill and Helkinton	-		79 16 43,5	} 4
Burrow Hill and Stathern Point	-		9 5 4,5	
			3,5	

Helkinton and Bardon Hill Summer House			79 14 56,75	} 56,5
			56	

Helkinton and Naseby	-		9 2 8,25	} 8,25
			8,5	

*At Bardon Hill.*

Arbury Hill and Helkinton	-		17 44 19,75	} 20,5
			21,25	

Corley and Castle Ring	-	-	59 32 32,5	} 32,25
			32	

Holland Hill and Stathern Point	-		39 39 16,25	} 16,5
			16,75	

Stathern Point and Helkinton			93 15 27,75	} 28
			28,25	

Corley and Helkinton	-	-	56 9 34,25	} 34,5
			34,75	

Tilton and Helkinton	-	-	50 32 31,25	
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*At Stathern Point.*

Tilton and Bardon Hill	-	-	56 44 45,25	} 45,25
			45,25	

Between				Mean.
Bardon Hill and Holland Hill	-	71	33 48 52 52	} 50,75
Cropwell Bishop and Bottesford	-	93	34 9	

*At Holland Hill.*

Bardon Hill and Cropwell Bishop	-	48	13 35 36,25 37,75	} 36,5
Bottesford and Cropwell Bishop	-	40	17 28,25 29,25	} 28,75
Sutton Ashfield and Lincoln Minster	-	98	5 59,25 59,75	} 59,5
Stathern Point and Lincoln Minster		73	30 59,25 58,75	} 59
Bardon Hill and Stathern Point	-	68	46 53,75 51,25 53	} 52,5

*At Orpit.*

Holland Hill and Sutton Ashfield	-	21	27 19,5 20 20,5 21 21,75	} 20,5
Bardon Hill and Weaver Hill	-	99	5 28 30,5 32,5	} 30,25
Castle Ring and Weaver Hill	-	43	2 17 14,75 13,25	} 15
Weaver Hill and Hathersage	-	97	49 55 56,5 57	} 56,25

*The Account of a  
At Castle Ring.*

Between				Mean.
Orpit and Weaver Hill	-	25	21 43 44	} 43,5
The Wrekin and Weaver Hill	-	105	18 58,5 58 58,5 59,5	} 58,75
Weaver Hill and Bardon Hill	-	80	54 27,5 28,5	} 28
Ashley Heath and Weaver Hill	-	61	9 42 43,5	} 42,75
Bar Beacon and The Wrekin	-	89	55 47,5 48,75 49	} 48,75

*At Bar Betcon.*

Castle Ring and Bardon Hill	-	74	45 31 31,5 28	} 30
Bardon Hill and Corley	-	48	55 50,5 49,5	} 50
Castle Ring and Corley	-	123	41 18 20	} 19
Lyckey Hill and The Wrekin	-	84	46 12,5 13,5	} 13
The Wrekin and Castle Ring	-	69	24 29,75 32 32,5 33	} 32

*At Horsemoor Hill.*

Lidlington and Trusler Hill	-	28	43 52,5 53	} 52,75
Trusler Hill and Hill Farm	-	77	33 58 59,5	} 58,75

*At Lilleyhoe.*

Between				Mean.
Lidlington and Royston	-	115 18	36,5 36,5 35	} 36
Bowbrickhill and Royston	-	139 18	11 15	} 13

*At Royston.*

Lilleyhoe and Lidlington	-	23 43	40,5 42 42,25	} 41,75
Lilleyhoe and Orwell	-	126 8	16,25 17,5	} 16,75
Maddingly and Balsham	-	41 12	36 31,5	} 33,75
Lilleyhoe and Maddingly	-	135 53	42,75 44,5 42,75 44	} 43,5
Balsham and Haddenham Spire	-	41 11	43,25 48,25 49	} 46,75
Lidlington and Maddingly	-	112 10	2,5 4,75	} 3,5
Lidlington and Orwell	-	102 24	39,5	
Orwell and Balsham	-	50 58	3,5	
Lilleyhoe and Balsham	-	117 6	23 23,25	} 23
Lidlington and Balsham	-	153 22	57,75	

*At Orwell.*

Maddingly and Balsham	-	54 0	43,25 43,5 44,75 45,75	} 44,5
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Between	°	'	"	Mean.
Royston and Lilleyhoe	35	24	19,25	} 20
			19,5	
			20,75	
			20,75	
Maddingly and Newmarket	50	58	0,5	} 1
			1,5	
Lilleyhoe and Balsham -	137	15	29	} 29
			29	
Newmarket and Balsham -	19	7	2,5	} 3
			3,5	
Balsham and Royston -	101	51	21,25	} 21,5
			21,75	
Lilleyhoe and Maddingly -	168	43	36,5	} 37,25

*At Maddingly.*

Northy and Balsham -	96	47	57,5	} 58,25
			58,75	
Orwell and Balsham	102	57	26,25	} 27,75
			27,25	
			29,5	
Orwell and Haddenham -	160	14	32,75	} 33
			33,25	

*Near Balsham.*

Haddenham and Newmarket -	66	59	13,25	} 14
			13,5	
			14,75	
			14,75	
Maddingly and Haddenham -	40	24	23,5	} 24
			24,75	
Orwell and Maddingly -	23	1	49,25	
Royston and Newmarket	157	36	0,25	

# Trigonometrical Survey.

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Between				Mean
Orwell and Newmarket	180	25	23,25 25	24

## At Newmarket.

Orwell May-pole and Royston	-	13	50	33,25 33,75	33,5
Royston and Balsham	-	14	50	44 45,75 46,5	45,5
Brandon and Balsham	-	176	0	11,25 12	11,5
Brandon and Littleport	-	58	55	3,5 4 5	4,25
Orwell May-pole and Royston	-	13	50	33,5	
Royston and Balsham	-	14	50	45,5	
Brandon and Balsham	-	176	0	11,25 12	11,5
Brandon and Littleport	-	58	55	3,5 4 5	4,25
Orwell May-pole and Littleport	-	88	23	40	

## At Brandon.

Thetford and Bartenham	-	53	16	31,25 31,25 31,75	31,5
Bartenham and Newmarket	-	94	39	21,75 21,75 22,25 22,75	22,25
Newmarket and Littleport	-	66	5	13,5 15 19	15,75



				Mean.
Between				
Littleport and Methwold	-	-	62 25 47 49,25	48
Methwold and Oxborough	.	.	25 4 58 58,5 59	58,5
Oxborough and Thetford	-	-	58 27 57 59	58
Methwold and Thetford	-	-	83 32 53,75	

*At Clifftop.*

Hathersage and Staincross	-	-	65 54 33,5 34,5	34
Hathersage and Bradfield Point	-	.	24 16 10 11 12 12,5	11,5

*At Hathersage.*

Bradfield Point and Pit Hill	-	-	32 4 18,75 19,25 19,75 19,75 20	19,5
Orpit and Pit Hill	-	-	150 54 39,25 41	40
Staincross and Beacon Hill near Clifton	.	.	50 45 24,75 28,5	26,75
Orpit and Axedge	-	.	69 35 47 47,25	47
Pit Hill and Lord's Seat	-	-	51 6 3,25 3,75 5	4
Lord's Seat and Axedge	-	-	30 12 46 46,25	46

*At Lord's Seat.*

Between				Mean.
Weaver Hill and Axedge	-	-	28 17 50,75 52,75	51,75
Hathersage and Axedge	-	-	117 19 50,25 52	51
Pit Hill and Hathersage	-	-	59 1 41 41,25 42,5 43,75	42
Hathersage and Weaver Hill	-	-	89 1 59 59,25	59
Pit Hill and Weaver Hill	-	-	148 3 37,75 38 40 41 42,5	40

*At Weaver Hill.*

Welsh Hill and Orpit	-	-	172 5 36,5 37 38	37,25
Orpit and Axedge	-	-	89 53 37 39,25	38
Lord's Seat and Orpit	-	-	73 19 28 28,25	28
Castle Ring and Ashley Heath	-	-	64 23 4,25 5,25	4,75
Ashley Heath and Mow Copt	-	-	42 11 17,5 22	18,75

*At Cleeve Hill.*

Malvern Station and Breadon Hill	-	-	33 44 27,5 28 28 29,5 29,5	28,5
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Between				Mean.
Broadway and Malvern Station	93	4	9,5 10,5	} 10
Broadway and Stow on the Wold	49	21	57,75	
Pen and May Hill	82	59	35,5 37,5 37,5 38,5	} 37,25
May Hill and Malvern Station	48	29	38,5 39,5 40 41,5 42 42	} 40,5

*At Malvern Station.*

May Hill and Cleeve	-	-	64	46	18,75 19	} 19
May Hill and Cradle Mountain	-	-	56	8	15,5 18 18	} 17,25
Trelleg Beacon and Cradle Mountain	-	-	40	14	16 18,25	} 17
Trelleg Beacon and Symmond's Hall	-	-	34	56	38,25	
Cradle Mountain and Brown Clay Hill	-	-	84	5	30,5 34,75	} 32,5
Cradle Mountain and Stow	-	-	49	58	40,5	
Broadway and Cleeve	-	-	27	27	35	

*At May Hill.*

Malvern Station and Breadon Hill	-	-	37	1	22 22 22,5	} 22,25
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Between				Mean.
Trelleg Beacon and Cradle Mountain	-	49	56 23 23,75 26,25	24,25
Cradle Mountain and Malvern Station		97	43 33,75 34 34,25	34
Trelleg Beacon and Symmond's Hall	-	69	12 37 38,5	37,75
Cleeve and Malvern Station	-	66	44 0,5 1 4	2

*At Trelleg Beacon.*

Cradle Mountain and May Hill	-	99	37 47 48,25 49	48
Cradle Mountain and Mynydd Mane	-	56	17 8 8,5 10,25 10,75	9,25
Dundry Beacon and Mynydd Mane	-	79	23 12,5 13 14,5	13,5
Cradle Mountain and Malvern Station		83	11 44,75 46	45,5
Symmond's Hall and May Hill	-	59	21 22 22,25 25	23
May Hill and Malvern Station	-	16	26 1,5 2,5 4 4,5	3
Malvern Station and Symmond's Hall		75	47 26	

*The Account of a**At Mynydd Mane.*

Between

				Mean.
Cradle Mountain and Trelleg Beacon	-	78 56	7	} 8
			9	
Dundry Beacon and Trelleg Beacon	-	63 21	8	} 9
			8,5	
			9	
			10	
			10,5	} 39,25
Cradle Mountain and Llangeinor Mountain		89 22	37,5	
			41	} 37,5
Llangeinor Mountain and Garth Hill	-	37 25	37,5	
Llangeinor Mountain and Capelante	-	41 35	35	} 36,25
			36,25	
			37	
			37	

*At Garth Hill,*

Llangeinor Mountain and Mynydd Mane		106 57	58	} 58,25
			58,5	
Llangeinor Mountain and Flatholme's Light				
House	-	152 52	33,5	} 34
			34,5	
Llangeinor Mountain and Ogmoor Down		51 2	31,25	} 32
			31,25	
			33,5	
Ogmoor Down and Duncary Beacon	-	42 42	28	} 28,75
			28,25	
			28,75	
			30	
Llangeinor Mountain and Duncary Beacon		93 44	58	} 59
			58,25	
			59,75	

*At Ogmoor Down.*

Llangeinor Mountain and Garth Hill	-	61 53	34,25	} 34,5
			34,75	

Between				Mean.
Duncary Beacon and Garth Hill	-	109 40	6 6,25 7 7,25	} 6,75
Duncary Beacon and Cefn Bryn	-	110 56	48 48,25 50,5 50,75	} 49,25
Cefn Bryn and Margam Down	-	43 7	52,75	
Margam Down and Llangeinor	-	34 21	33,75 34,5	} 34,25
Margam Down and Newton Down Signal Staff	-	15 44	56,5 57 57,5	} 57
Margam Down and the Signal Staff on Vole Vour near Neath	-	11 18	22 22,25 23,75 25	} 23,25
Margam Down and the Signal on Kilvey Hill near Swansea	-	22 33	21 21,5 22,5 22,5	} 22
Margam Down and Cefn Bryn Signal Staff	-	43 8	12,5 13,5 14,5 15,5	} 14
Margam Down and the Signal Staff near Cowbridge	-	117 25	54,5 55,5	} 55
Duncary Beacon and Parracombe	-	31 4	51,25	

Between				Mean.
Parracombe and Hangman Hill	-	-	15 57 35	} 35,25
			35	
			35	
			36,25	

*At Llangeinor Mountain.*

Cradle Mountain and Mynydd Mane	-	42	1	13,25	} 14
				14,75	
Mynydd Mane and Garth Hill	-	35	36	24,25	} 25
				26	
Flatholme's Light House and Garth Hill		13	36	8	} 8,25
				8,5	
Mynydd Mane and Capelante	-	71	54	46	} 47,5
				46,25	
				48,5	
				49,5	
Ogmoor Down and Garth Hill	-	67	3	52,25	} 52,5
				52,75	
Ogmoor Down and Margam Down	-	50	3	3	} 4,25
				5,5	
Margam Down and Trecastle Beacon	104	20	9	9	} 9,5
				9,5	
				10,25	
Garth Hill and Duncary Beacon	-	61	42	51,5	

*At Margam Down.*

Ogmoor Down and Llangeinor Mountain	95	35	22	} 22,5		
			23			
Ogmoor Down and Cefn Bryn	-	116	54	15,5	} 16,5	
				17,5		
Cefn Bryn and Lannon	-	-	32	1	11	} 12
					13	

Between				Mean.
Llangeinor Mountain and Trecastle Beacon	56	39	49 50,25 52	} 50,5
Lannon and Trecastle Beacon	58	49	18 18	} 18

*At Cefn Bryn.*

Ogmoor Down and Duncary Beacon	31	35	27,25 27,25	} 27,25
Ogmoor Down and Margam Down	19	57	51 51,5 53,5	} 52
Margam Down and Lannon	91	3	15 17,25 17	} 16,25
Lannon and Marros Beacon	57	55	37,25 39,25	} 38,25

*At Marros Beacon.*

Lannon and Cefn Bryn	31	13	13 15,75 16	} 15
Lannon and Precelly Mountain	115	22	28 29 29 30,5 31	} 29,5
Precelly Mountain and Highgate Mountain	83	40	18,5 19,5 20,75 21,25	} 20
Highgate Mountain and Newton Down	19	5	59,75	



*At Lannon.*

Between				Mean.
Margam Down and Cefn Bryn	-	56	55 34	} 34,5
			34,5	
			35	
Cefn Bryn and Marros Beacon	-	90	51 7	} 8
			8,25	
			9,25	
Margam Down and Trecastle Beacon	-	56	12 9,25	} 10,5
			10	
			11,25	
			11,5	
Trecastle Beacon and New Inn Hill	-	74	9 12,25	} 13
			12,75	
			13,5	
New Inn Hill and Precelly Mountain	-	53	5 24	} 25
			26	
Precelly Mountain and Marros Beacon	-	28	46 24,75	} 25,25
			25,75	

*At Precelly Mountain.*

Marros Beacon and Lannon	-	35	51 6,75	
Marros Beacon and Highgate Mountain		47	19 13	
Plumstone Down and St. Ann's Hill	-	20	26 6	} 6
			5,75	

*At Plumstone Down.*

St. Ann's Hill and Precelly Mountain	-	140	0 42,5	} 42,75
			43	
Precelly Mountain and Newton Down		85	23 56,5	

*At St. Ann's Hill.*

Precelly Mountain and Plumstone Down		19	33 12,25	} 13
			12,75	
			14	

Between

Plumstone Down and Newton Down - 50 45 37

Mean.

*At Highgate Mountain.*

Marros Beacon and Precelly Mountain 49 0 26,25 }  
27,75 } 27,5  
28

•Marros Beacon and Newton Down - 58 6 19,75 }  
20 } 20,5  
21  
21,25

*At Newton Down.*

Marros Beacon and Highgate Mountain 102 47 39 }  
40,5 } 40,5  
41,75

Marros Beacon and Precelly Mountain 65 7 50 }  
50,75 } 51,5  
52  
53,25

Precelly Mountain and Plumstone Down 52 45 33,75 }  
34,5 } 34,5  
35,75

Plumstone Down and St. Ann's Hill - 74 37 37,25 }  
38,5 } 39,25  
40,5  
40,75

*At New Inn Hill.*

Lannon and Treastle Beacon - - 63 13 18 }  
18,5 } 18,25

Lannon and Precelly Mountain - - 94 38 58 }  
58,5 } 58,75  
59,5

Treastle Beacon and Talsarn - - 95 9 37,75 }  
38 } 38,5  
39,5

Between				Mean.
Precelly Mountain and Capel Kynon	-	59 49	27,25 28 29,5 30 30,75	29
Capel Kynon and Talsarn	-	47 8	34,75 35,5 37,25	36

*At Talsarn.*

Precelly Mountain and New Inn Hill	-	43 49	8,25 9,75	9
New Inn Hill and Trecastle Beacon	-	50 4	48,75 50 50,25 51,75	50,25
New Inn Hill and Capel Kynon	-	44 38	23,25 24 25,75	24,25
Tregarron Down and Trecastle Beacon		56 46	42,75 43,25	43
Tregarron Down and Aberystwith Station		74 32	0 5 2,75	1,5
Tregarron Down and Llandowry Brevi Down		30 32	3 3 4,75 6,25	4,25

*At Capel Kynon.*

Precelly Mountain and New Inn Hill	-	90 28	19,25 19,5 21,75	20,25
New Inn Hill and Talsarn	-	88 12	59,75	

*At Tregarren Down.*

Between				Mean.
Talsarn and Trecastle Beacon	-	98 53 0	1,75	1
Plynlimmon and Aberystwith Station	-	44 23 31,25	31,75	31,5
Aberystwith Station and Talsarn	-	59 51 6,5	7,5	8
			8	
			9,75	
Plynlimmon and Llandinam Mountain	-	43 44 2		
Llandinam Mountain and Capellante	-	96 31 43,5	45,75	44,5
Talsarn and Llandowy Brevi Down	-	61 59 23	23,5	23,5
			24	

*At Aberystwith Station.*

Plynlimmon and Tregarren Down	-	66 50 29	30,5	31	30
Tregarren Down and Talsarn	-	45 36 53,5	55,25	56	55
Rhiw Mountain and Pengarn Mountain		45 23 55,75	56,5	57	56,5
Rhiw Mountain and Snowdon	-	39 44 27	29,25		28
Rhiw Mountain and Cader Idris	-	60 6 50			
Plynlimmon and Cader Idris	-	57 53 27,5			

*At Llandinam Mountain.*

Long Mountain and Stow Hill	-	58 27 19,25	21	20
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Between

Mean.

Long Mountain and Radnor Forest	-	93	14	17	} 18
				18,25	
				19	
Long Mountain and Arran Fowddy	-	65	49	26	
Plynlimmon and Arran Fowddy	-	54	55	22	
Long Mountain and Plynlimmon	-	120	44	50	} 50,25
				50,5	
Plynlimmon and Rodney's Pillar	-	115	35	24	} 25,5
				27	
Plynlimmon and Tregarron Down	-	49	3	6,75	} 8
				8	
				9	
Tregarron Down and Capellante	-	49	37	25,5	

*At Stow Hill.*

Long Mountain and The Wrekin Staff	-	52	20	57	} 58
				57,5	
				58,25	
				59	
Brown Clay Hill and The Wrekin Staff	-	23	28	31,25	} 32
				32	
				32,75	
Brown Clay Hill and Long Mount Pole	-	40	7	49,75	} 51,25
				51,25	
				52,5	
Long Mountain and Long Mount Pole	-	35	41	38,75	
Brown Clay Hill and Malvern Station	-	56	46	15	} 16
				16,5	
				16,5	
Malvern Station and Cradle Mountain	-	67	59	49	} 50
				51	

Between				Mean.
Long Mountain and Llandinam Mountain	67	32	18,5 20 21	} 20
Llandinam Mountain and Radnor Forest	51	3	11,25 11,75 13	
Radnor Forest and Cradle Mountain	40	54	57,5 57	

*At Radnor Forest.*

Long Mountain and Llandinam Mountain	53	29	5	} 50
Llandinam Mountain and Stow Hill	94	9	49,5 50,75	
Stow Hill and Cradle Mountain	120	30	47 47	

*At Symmond's Hall.*

May Hill and Trelleg Beacon	51	26	3 4 5,5	} 4,25
Trelleg Beacon and Malvern Hill	69	15	56,5 59 61,5	
Trelleg Beacon and Dundry Beacon	70	4	23 24,25	

*At Rhiw Mountain.*

Llwydiart Mountain and the Signal Staff on Holyhead Mountain	33	24	5,75 6,5 16,5	} 7,5
Llwydiart Mountain and Ynaliog Mountain	138	3	37,5 38	
Ynaliog Mountain and Snowdon	162	28	37 38,5	

Between				Mean.
Llwydiart Mountain and Bwlch Mawr	14	43	6,25 7 7,75	7
Pengarn Mountain and Snowdon	58	14	49 49,5 50	49,4
Pengarn Mountain and Bwlch Mawr	67	56	45 46,5	45,75
Pengarn Mountain and Cader Idris	6	18	10,75 12 13	12

*At Llwydiart Mountain.*

Llanelian Mountain and Moel Rhyddlad	37	2	59 60 60,5	59,75
Rhiw Mountain and Moel Rhyddlad	83	1	35 35,5	35,25
Llanelian Mountain and the Signal Staff on the Great Orme's Head	105	49	43 45,5 45,5 46	45
Moel Rhyddlad and Snowdon	131	13	5,5 7,5 8,25 10,25	
Moel Rhyddlad and the Signal Staff on Holy- head Mountain	17	52	33,25 33,75 34,25 36,5	34,25
Moel Rhyddlad and Ynaliog Mountain	78	18	19 20	19,5

Between

Moel Rhyddlad and Bwlch Mawr

			Mean.
95	4	4,5	} 5
		5	
		5,5	

*At Llanellian Mountain in Anglesea.*

Llwydiart Mountain and Snowdon

7	25	39,5	} 41
		42,5	

Llwydiart Mountain and Llanellian Mountain

37	47	29,5	} 30,4
		30,5	
		31	
		31	

Llwydiart Mountain and Moel Rhyddlad

111	13	17	} 19
		18	
		19,5	
		20	
		20,25	
		20,5	

Moel Rhyddlad and the Signal Staff on the

Skerry Island

-	-	-	15	46	31,5	} 32
					32	
					32,5	

Llwydiart Mountain and the Signal Staff on

Table Hill

-	-	-	20	7	30,25	} 31,5
					30,75	
					31	
					32,75	
					33,25	

Llwydiart Mountain and the Signal Staff on

the Great Orme's Head

-	-	46	36	30	} 31,75
				31,75	
				32	
				33	



Between							Mean.
Llwydiart Mountain and the Signal Staff on							
Holyhead Mountain	-			98	31	57,25 58,25 60,25 60,5	} 59
Garreg Mountain and Llanelian Mountain		13	7			8,25	

*At Moel Rhyddlad.*

Llanelian Mountain and Skerry Light-house	121	18	18				
						19	
						19	19,5
						19,5	
						21	
Llanelian Mountain and Llwydiart Mountain	31	43	42,5			43,5	
						44,5	} 44,5
						45,5	
						46	
Llwydiart Mountain and Snowdon	-	24	0	54,5		54,5	
						55	} 54,75
Llwydiart Mountain and Rhiw Mountain	71	53	56,5			57,75	
						59,25	} 58,5
						60	
Llwydiart Mountain and Holyhead Mountain Signal Staff	-	116	10	0		0,5	
						4	} 1,5
Llwydiart Mountain and Ynaliog Mountain	78	24	42			42,75	
						44	} 43

Between

				Mean.
Llwydiart Mountain and Bwlch Mawr	-	48 35 21		
		21,25		
		22		
		22,75		21,75

June 22. Pole Star at its greatest eastern elongation from the Meridian and the top

of the Skerry Light House	-	42 36 57,5		
29.		37 7		4
30.		7,5		

June 23. The Pole Star at its greatest western elongation from the Meridian and the top of the Skerry Light House

	-	36 47 12,5		
24.		14,5		12
29.		9		

*At Pengarn Mountain.*

Rhiw Mountain and Snowdon	-	62 48 16		
		16,5		16,25

Rhiw Mountain and Bwlch Mawr	-	36 35 43		
		43,5		
		43,5		43,5

Rhiw Mountain and Cader Idris	-	140 14 20		
		21,5		
		22		21

Cader Idris and Aberystwith Station	-	111 48 50,75		
		52		51,5

*At Plynlimmon.*

Llandinam Mountain and Arrennig	-	99 24 18		
		19		18,5

Llandinam Mountain and Cader Idris	-	120 25 55,5		
		58		
		60		58

Between				Means
Llandinam Mountain and Rodney's Pillar	42	12	9	
			9,5	
			10,5	>11
			11	
			12,5	
			13	
Llandinam Mountain and Radnor Forest	16	46	0,5	1,25
			2	
Llandinam Mountain and Tregarron Down	87	12	50	
			50,5	51
			52,5	
Tregarron Down and Aberystwith Station	68	45	59	
			60	60
			60,75	
Llandinam Mountain and Arran Fowddy	92	2	8,5	9,1
			10,75	
<i>At Long Mountain.</i>				
Cyrn y Brain Mountain and Arrennig	47	56	2	
			2,75	2,1
Cyrn y Brain Mountain and The Wrekin	93	3	52,5	
			52,5	53,25
			54,5	
Cyrn y Brain Mountain and Hawkeston				
Obelisk - - - -	59	58	31,5	
			34	33,5
			35	
Stow Hill and The Wrekin - -	84	0	3	
			4	3,5
Ashley Heath and Hawkeston Obelisk -	4	44	32	
			32	32
Stow Hill and Llandinam Mountain -	54	0	22	
			23	22,75
			23	

Between				Mean.
Llandinam Mountain and Arrennig	-	80 59 40	40,25	40
Llandinam Mountain and Cader Idris	-	53 0 12,5	13,5	13
Llandinam Mountain and Rodney's Pillar	155	0 23		
Stow Hill and a very high Pole near Tre-				
ginnan	-	37 12 11,25	12	12
			12	
			13	
Cyrn y Brain Mountain and Trinity Spire,				
Chester	-	19 32 56	56,5	56,5
			57	
Cyrn y Brain Mountain and Cader Ferwyn	26 20	52,5	53	52,75
Cyrn y Brain Mountain and Arran Fowddy	60 57	38		
Llandinam Mountain and Arran Fowddy	67 58	3	3,5	3,25
Llandinam Mountain and Radnor Forest	33 16	37,75	40	39

*At Brown Clay Hill.*

Ashley Heath and Rodney's Pillar	-	64 19 8		
Ashley Heath and Long Mount Pole	-	83 43 56	56	56
Ashley Heath and Hawkeston Obelisk	-	19 10 1,75	2,25	2
Stow Hill and The Wrekin	-	122 50 14,5	14,75	14,5
Stow Hill and Long Mount Pole	-	47 12 28,75	31,25	30,75
			32	

Between					Mean.
Stow Hill and Malvern Station	-	89	6	54,25 55,5	55
Bar Beacon and The Wrekin	-	68	11	15,75	
<i>At Ashley Heath.</i>					
Weaver Hill and The Wrekin	-	129	55	22,5 23 24,5	23
Weaver Hill and Mow Copt	-	45	40	37 37,25 38 39,75	38
Delamere Forest and Cynr y Brain Mountain		44	30	31 32,5 34,5	32,75
Delamere Forest and Hawkeston Obelisk		80	37	19 21 22,5	21
Delamere Forest and Rodney's Pillar	-	84	29	49,5 52	50,75
Delamere Forest and Mow Copt	-	58	17	23 24,5 26	24,5
Cynr y Brain Mountain and The Wrekin		81	36	0 1,5 2,5	1,5
Brown Clay Hill and Rodney's Pillar	-	47	26	29 31,5	30,25
Brown Clay Hill and Hawkeston Obelisk		51	18	49,25 50 50,75	50
Brown Clay Hill and the Pole on Long Mount Forest	-	21	27	3,5 6,5 7,25	5,75

# Trigonometrical Survey.

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Between			Mean.
The Wrekin and Long Mount Pole	-	15 37 25 25,5	} 25,25
<i>At Cym y Brain Mountain.</i>			
Delamere Forest and Ashley Heath	-	45 50 50,5 51 52,25 52,75	} 51,5
Delamere Forest and Hawkeston Obelisk	60 26	45 45,5 46	} 45,5
Delamere Forest and Garreg Mountain	74 23	15,5 15,75	} 15,5
Ashley Heath and Long Mount Pole	-	55 20 33,5 36,75	} 35,5
Ashley Heath and Rodney's Pillar	-	62 23 3,5 4,75	} 4
Ashley Heath and Long Mountain	-	68 44 34 34,5 34,5	} 34,5
Ashley Heath and The Wrekin	-	30 28 28 31,5 32	} 30,5
Long Mountain and Arrennig	-	78 27 45,5 47,5	} 46,5
Long Mountain and Hawkeston Obelisk	54 8	38,5 40,5 41	} 40
Long Mountain and Afran Fowddy	-	58 48 27,5	
Long Mountain and Cader Ferwyn	-	48 54 55,5 57 59	} 57
Snowdon and Moel Fammau	-	69 30 52,5 54 55,5	} 54

Between				Mean.
Llanelian Mountain and Moel Fammau	33	49	6 6,5 7	} 6,5
Llanelian Mountain and Garreg Mountain	40	12	19 19,5	} 19,25
Garreg Mountain and Arrennig	92	33	30,5 31 33	} 31,1

*At Llanelian Mountain in Denbighshire.*

Moelfre Issa and the Signal Staff on the Great Orme's Head	138	45	46 46,5 47,5 48	} 47
Garreg Mountain and the Signal Staff on the Great Orme's Head	124	52	9,5 10 12	} 10,5
Garreg Mountain and Moel Fammau	27	59	37,5 38,5 40	} 38,75
Arrennig and the Signal Staff on the Great Orme's Head	135	0	4,5 4,75 5,75	} 4,75
Cyrn y Brain Mountain and the Signal Staff on the Great Orme's Head	166	16	20,5 21,5 23	} 21,75
Llanelian Mountain and the Signal Staff on the Great Orme's Head	23	15	50,5 52 52,5 52,5	} 52

Mean.

Between					Mean.		
Cyrn y Brain Mountain and Cader Ferwyn	25	44	41,5 44 44,5	}	43,5		
Cyrn y Brain Mountain and Biflinge Beacon	55	42	37,5 38			}	37,75
<i>At Garreg Mountain.</i>							
Llanelian Mountain in Denbighshire and the Signal Staff on the Great Orme's Head	15	12	23 24 26,5 26,5	}	25		
Llanelian Mountain in Denbighshire and Cyrn y Brain Mountain	-	-	-				
	98	23	30 30,5 32 32 32,5			}	31,5
Cyrn y Brain Mountain and Arrennig	-	52	12				
			57,5 59,5 59,5	}	59		
Cyrn y Brain Mountain and Delamere Forest	62	29	12,25 14 14,75			}	13,75
Llanelian Mountain in Denbighshire and Moel Fammau	-	-	-				
	92	43	51,75 53 54,25	}	53		
Llanelian Mountain in Denbighshire and Llanelian Mountain in Anglesea	-	18	44				
			52,25 53,5 54,75	}	53,5		
Cyrn y Brain Mountain and Gwaunysgaer Down	-	-	-				
	122	42	9 11 11,75	}	10,75		



Between				Mean.
Snowdon and Gwaunysgaer Down	-	51 35	9,25 10,75 11	} 10,5
Cyrn y Brain Mountain and Arran Fowddy		41 30	5,75 6,5 8,5	} 7
Billinge Beacon and Gwaunysgaer Down		122 19	48 48,5 50 53	} 50
<i>At Delamere Forest.</i>				
Cyrn y Brain Mountain and Garreg Mountain		43 7	32 32,5 34	} 33
Cyrn y Brain Mountain and Ashley Heath		89 38	37 38 40	} 38,5
Cyrn y Brain Mountain and Hawkeston				
Obelisk	-	63 50	20 21 22,5	} 21
Ashley Heath and Mow Copt	-	38 8	17 18,25	} 17,5
Ashley Heath and Rodney's Pillar	-	55 4	35,5	
Garreg Mountain and Billinge Beacon		74 56	54 55,5 57 58,5	} 56
Mow Copt and Kelsall Staff.	-	111 32	48 48,5 50	} 49
Kelsall Staff and Denham Spire	-	140 12	4,5 6 8	} 6,25

Between				Mean.
Cyrn y Brain Mountain and Moel Fammau	20	53	56,5 58,5	} 57,5

Oct. 17. Pole Star at its greatest apparent western elongation and Kelsall Staff	135	8	5	} 8,5
18.			6,75	
19.			8,25	
21.			14	

Oct. 18. Pole Star at its greatest apparent eastern elongation from the Meridian and Kelsall Staff	-	-	140	53	56,75	} 8,75
19.				54	10,75	
20.					2,75	
22.					4,25	

*At West End of Base.*

Gwaunysgaer Down and East End of Base	20	34	1,5 2,5 3,5	} 2,5	
Moelfre Issa and East End of Base	-	75	45		} 17
			16 17,5 17,75		
Moelfre Issa and Cave Hill Signal Staff	70	51	14,5 15 17	} 15,5	

*At East End of Base.*

Gwaunysgaer Down and West End of Base	135	11	59 59,25 59,5 59,5 60 60	} 59,5	
Moelfre Issa and West End of base	-	40	12	32 34	} 33

*At Gwaunysgaer Down.*

Between				Mean.
East End of Base and West End of Base	24	14	0,5	} 1,5
			1,5	
			2,25	
			2,5	
West End of Base and Moelfre Issa	-	21	40 24	} 25
			24,5	
			27	
Moelfre Issa and the Signal Staff on the				
Great Orme's Head	-	37	42 34	} 34,75
			35,5	

*At Moelfre Issa.*

East End of Base and West End of Base	64	2	10	} 11
			10	
			12	
West End of Base and Gwaunysgaer Down	62	0	18,25	} 19,5
			19	
			20,75	
Gwaunysgaer Down and the Signal Staff				
on the Great Orme's Head	-	117	26 10	} 11,25
			10,5	
			13	
Llanellian Mountain and the Signal Staff				
the Great Orme's Head	-	21	49 25	} 26
			27	

*At Burleigh Moor.*

Easington and Hartlepool Signal Staff	124	53	42,5	
Easington and Danby Beacon	-	40	44 47	
			50	
			51	} 51,5
			55	
			55	

Between			Mean.
Barnaby Moor Pole and Easington	-	160 28 52 53	} 52,5
Barnaby Moor Pole and Roseberry Top	-	42 58 55 55,5 57,5 58	} 56,5
Easington and Wordeslow Hill	-	131 33 54,5 56,5 57	} 56

• *At Easington Heights.*

Barnaby Moor Pole and Burleigh Moor		5 50 55	
Barnaby Moor Pole and Botton Head	-	45 20 6 .7,5	} 6,75
Botton Head and Loosehoe	-	26 13 22 22 22,5 22,5 22,5	22,5
Botton Head and Wordeslow Hill	-	88 18 12,25	
Loosehoe and Stow Brow	-	65 0 34 37 38,5	} 36,5
Loosehoe and Fair Head	-	47 40 5 5,5 6	} 5,5
Burleigh Moor and Wordeslow Hill	-	37 7 16 18,25	} 17

• *At Botton Head.*

Easington and Barnaby Moor Pole	-	49 47 39 41,5 42	} 40,75
Easington and Hartlepool Signal Staff	-	52 2 59 1 3 1 2	} 0,5

Between					Mean.
Easington and Roseberry Top	-	48	52	20	} 21,25
				21,5	
				22,5	
Easington and Loosehoe	-	51	0	23	} 23
				22,25	
Loosehoe and Wilton Beacon	-	62	15	1	
Loosehoe and Hambleton Down	-	112	50	33,5	} 35
				33	
				35,5	
				36,5	
				37	
Loosehoe and Barnaby Moor Pole	-	100	48	3,25	} 4,5
				5,5	
Wilton Beacon and Hambleton Down	-	50	41	34,5	
Wilton Beacon and Hemingbrough Spire	-	19	20	11	} 11,5
				11	
				12,5	
Wilton Beacon and York Minster	-	24	40	10,5	} 15,25
				17	
				18	
York Minster and Hambleton Down	-	26	1	19	
Easington and Wordeslow Hill	-	65	37	32,5	} 33
				33,5	

*At Loosehoe.*

Botton Head and Easington	-	102	46	12	} 14
				13	
				13,5	
				14	
				15	
				15	
Easington and Fair Head	-	66	59	7	} 11,75
				11	
				13	
				16	

Between				Mean.
Easington and Stow Brow	-	-	75 20 37 38 39	} 38
Easington and Barnaby Moor Pole	-		52 41 21,25	
Wilton Beacon and Botton Head	-		105 51 29,5	
Wilton Beacon and Hambleton Down	-		61 14 39 41,5	} 40,25
Botton Head and York Minster	-		80 41 36 38,5 40 41	} 39
Botton Head and Hambleton Down	-		44 36 46 48 53	} 49
Wilton Beacon and York Minster	-		25 9 53,5 56,5 58,5	} 56,25
Wilton Beacon and Hemmingbrough Spire			16 5 59	
Stow Brow and Pickering Common	-		33 39 41,5 42 44	} 42,5
Stow Brow and Kirby Underdale Station			75 30 45,5	
Botton Head and Barnaby Moor Pole	-		50 4 54	

*At Wilton Beacon.*

Botton Head and Loosehoe	-		11 53 29 28	} 28,5
Loosehoe and Hambleton Down	-		34 0 15 16 17,5 18,5	} 16,75

Between				Mean.
Hambleton Down and Botton Head	-	22	6 50	} 51,5
			50	
			51,5	
			51,5	
			52	
			53,5	} 51,5
Botton Head and Hemingbrough Spire	126	5	49,5	
			50,75	
			51,5	
			52	
			53,5	
Botton Head and York Minster	-	75	45 14	} 15
			14,5	
			15	
			15,5	
			16	
Hunsley Beacon and Hemingbrough Spire	58	16	36,5	} 37,75
			39,5	
Hunsley Beacon and York Minster	108	37	9	} 10,25
			9,5	
			10	
			12,5	
Loosehoe and York Minster	-	87	38 40	} 42,25
			43	
			43,5	

*At Hunsley Beacon.*

Crowle and Wilton Beacon	-	113	21 8,5	} 12,25
			14	
			15	
Wilton Beacon and York Minster	-	32	10 57	} 58,75
			59	
			59,5	
			60	
Crowle and York Minster	-	81	10 11,5	} 12,75
			14,5	

Between	.	'	"	Mean.
Crowle and Hemingbrough Spire	44	58	18 20 23	} 20,25
Wilton Beacon and Hemingbrough Spire	68	22	49 51,5	

*At Crowle.*

Brayton Spire and Hunsley Beacon	74	48	16,5 18 19 20,5	} 18,5
Hemingbrough Spire and Hunsley Beacon	67	54	1 2 2 2,5 3,5	
Gringley and Clifton	46	54	33,5 33,5 34 36 37,5 38	
Brayton Spire and Clifton	85	11	1,25 2 2 4,75	

*At Staincross Heights.*

Hathersage and Holme Moss	65	51	1,75 2,5 3	} 2,5
Hathersage and Bradfield Point	8	48	40,75 42 45,5	



Between				Mean.
Ledstone Beacon and Bradfield Point	-	167	52	33,75
				34,75
				35,5
Ledstone Beacon and Holme Moss	-	135	5	5,5
				6,5
				9,5
Hemingbrough Spire and Holme Moss		163	56	0,25

*At Boulsworth Hill.*

Ingleborough and Bleasdale Forest	-	45	51	56	
				56,5	
				56,5	
				57	
Ingleborough and Pendle Hill	-	39	22	46,75	
				47,25	
				49,25	
				49,75	
Ingleborough and Great Whernside	-	36	31	2,5	
				3	
				3	
				3,75	
Wittle Hill and Bleasdale Forest	-	76	12	11	
				14,75	
Wittle Hill and Holme Moss	-	57	44	10,5	
				11,5	
				13,5	
Wittle Hill and Pendle Hill	-	82	41	12,75	
				17,75	
				21,75	
Rumbles Moor and Great Whernside		51	53	32,5	
				38,75	
Rumbles Moor and Pendle Hill	-	127	47	25,25	
				26,75	

*At Ingleborough.*

Between				Mean.
Black Comb and Helvellin Mountain	-	35	15 14,5 16,5	} 15,5
Black Comb and Coniston Fell	-	16	9 33,5 35,75 38,75	} 36
Black Comb and The Calf	-	61	35 32,25 34	} 33
Black Comb and Bleasdale Forest	-	71	49 42 42,75 45,25	} 43,5
The Calf and Helvellin Mountain	-	26	20 17 19,5	} 18,25
The Calf and Coniston Fell	-	45	25 55,75 57,75	} 56,75
The Calf and Shunnor Fell	-	43	31 18,75 19,25	} 19
The Calf and Great Whernside	-	109	42 5 10	} 7,5
Boulsworth Hill and Bleasdale Forest	-	54	11 28,5 29,75 29,75 30,75	} 29,75
Boulsworth Hill and Great Whernside	-	62	41 5,5 6,5 9,25 10	} 7,75
Great Whernside and Pennigant Mountain	-	5	33 15 17	} 16

*At Rumbles Moor.*

Hambleton Down and Black Hambleton	6	11 3,75 7 9,25	} 6,75
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Between				Mean.
Hambleton Down and Great Whernside	67	17	43	} 44
			43,5	
			44,5	
			44,5	
Hambleton Down and York Minster	36	2	19,5	} 20,25
			21	
Boulsworth Hill and Pendle Hill	20	24	4,75	} 6
			7,25	
Boulsworth Hill and Holme Moss	57	26	31,75	} 32
			32	
Boulsworth Hill and Great Whernside	95	57	49,75	} 50,25
			49,75	
			50,75	
Ledstone Beacon and Holme Moss	72	16	30,5	} 31,75
			33	
Great Whernside and Holme Moss	153	24	15,5	} 19,5
			18,75	
			22,5	

*At Ledstone Beacon.*

Rumbles Moor and Hemingbrough Spire	158	23	6,75	} 9
			7,5	
			9	
			12,75	
Rumbles Moor and York Minster	103	17	40	} 41,75
			43,5	
Staincross Heights and Hemingbrough Spire	120	9	9,5	} 10,5
			9,75	
			10,5	
			12,25	
Hambleton Down and Hemingbrough Spire	84	34	0,75	
Holme Moss and Hemingbrough Spire	143	16	32,25	} 33,5
			35	
Hambleton Down and Black Hambleton	2	49	58,25	

*At Black Hambleton.*

Between				Mean.
Rumbles Moor and Great Whernside	31	38	35,75 35,75 36,75 38,75	36,75
Great Whernside and Water Crag	32	56	48,25 52,5 54	51,75
Hambleton Down and Water Crag	122	11	25,25 30,25	27,75
Hambleton Down and Botton Head	118	53	1,75 3,25 3,75 4,75 4,75 5	

*At Hambleton Down Station.*

Ledstone Beacon and Brayton Spire	16	43	17,5 18,75 24,5 24,75	21,25
Ledstone Beacon and Hemingbrough Spire	23	44	0,25 2,25	1,25
Hemingbrough Spire and Wilton Beacon	30	46	30,5	
Black Hambleton and Botton Head	42	55	24,25 24,75	24,5
Botton Head and Wilton Beacon	107	11	36,5	
Wilton Beacon and York Minster	31	28	23,5 25	24,25
Rumbles Moor and York Minster	62	11	40,25 41,75	41
Black Hambleton Down and Rumbles Moor	116	12	53,5 56,75 61,75	57,25

Between				Mean.
Ledstone Beacon and Rumbles Moor	39	9	26	} 28,5
			27,25	
			27,5	
			33,5	
Black Hambleton Down and Great Whernside	82	56	27,75	} 29,5
			31,5	
Black Hambleton Down and Wilton Beacon	150	7	0	} 2,5
			1	
			6,5	
Black Hambleton Down and Ledstone Beacon	155	22	23	} 24,5
			25,75	
<i>At Brandon Down.</i>				
Botton Head and Black Hambleton	15	36	47	} 50
			53	
Botton Head and Wordeslow Hill	77	58	42,75	} 43,75
			43,25	
			44,75	
Water Crag and Burleigh Moor	102	17	33	} 33,75
			34,5	
Water Crag and Black Hambleton	67	43	27,5	} 31,5
Burleigh Moor and Wordeslow Hill	59	1	30,75	
			30,75	
			32	
			32,75	} 42,75
Pontop Pike and Wordeslow Hill	81	21	39,5	
			43,25	
			45,25	} 31,5
Collier Law and Wordeslow Hill	141	40	29	
			30,75	
			32,25	
			34,5	

Between				Mean.
Pontop Pike and Collier Law	-	-	60 18	49,25 51,25 52 } 51
Water Crag and Collier Law	-		57 0	23 24,25 24,75 25,25 } 24,25
Black Hambleton and Botton Head	-		15 36	47 53 } 50

*At Heswell Hill.*

Cyrn y Brain Mountain and Delamere Forest	74	28	39,25 39,5	} 39,5
Delamere Forest and Billinge Beacon	-	61 10	54,5 54,75 56 57,75	} 55,75
Billinge Beacon and Gō Hill	-	- 26 17	27,75 30,25 32,75	} 30,25
Cyrn y Brain Mountain and Everton Flagstaff	-	-	147 48	43,5 42,5 47,25 } 44,25
Delamere Forest and Everton Flagstaff	73	20	6 7,75	} 7
Ormskirk Spire and Everton Flagstaff	-	12 14	11 17,75	} 14,5
Everton Flagstaff and the Landmark with a Vane near Formby	-	-	39 34	2,75 5,5 8,75 } 5,75

Between				Mean.
Everton Flagstaff and the Landmark with-				
out a Vane near Formby	-	34	46	43,5 45,75 } 44,5

*At Belle-field Hill.*

Billinge Beacon and Heswell Hill	-	65	49	36,25 36,5 40,25 41 } 38,5
Billinge Beacon and Rivington Hill		35	44	0,25 0,25 2,25 } 1
Delamere Forest and Billinge Beacon	-	126	53	15,25 19,25 17,75 20 } 18,25

*At Billinge Beacon.*

Cyrn y Brain Mountain and Delamere Forest		34	13	45,75 46 51,25 } 47,75
Belle-field Hill and Delamere Forest	-	24	5	14 16 18,5 } 16,25
Delamere Forest and Mow Copt	-	34	1	7 7,5 9,5 9,5 10 } 8,75
Rivington Hill and Knoll Hill	-	19	11	0 1,5 1,75 2,75 5,25 6 6,25 } 4

Between				Mean.
Delamere Forest and Rivington Hill	-	132 2	19,5 20,5 20,75 24,5	} 21,5
Belle-field Hill and Rivington Hill	-	107 57	1,5 1,75 4,75	} 2,75
Go Hill and Delamere Forest	-	119 41	22,5 23,5 24,5 26,5 28	} 25
Rivington Hill and Bleasdale Forest	-	96 33	51,5 51,5 54,5 56,75 57,5	} 54,25
Go Hill and Rivington Hill	-	108 16	13 15 16,5 17,25	} 15,25
Rivington Hill and the Landmark with a Vane near Formby	-	125 22	6,5 7 9,5	} 8
Rivington Hill and the Landmark without a Vane near Formby	-	125 28	5,5 9,75 10	} 7,75
Belle-field Hill and Everton Flagstaff	-	89 18	48 49,25	} 48,5
Delamere Forest and Heswell Hill	-	56 47	6 8,5	} 7,25



*At Go Hill.*

Between				Mean.
Billinge Beacon and Heswell Hill	-	90 48	9,25 11 12	10,75
Billinge Beacon and Rivington Hill	-	41 51	22 24,25 24,75	23,75
Billinge Beacon and Chorley Down	-	51 3	27,75 29,25 29,75 32 32,25	30,25
Billinge Beacon and Bleasdale Forest	-	90 14	43,75 44,25 46,25	44,75
Billinge Beacon and Beryl Hill	-	131 34	46,25 50 50,5 50,5	49,5

*At Knoll Hill.*

Wittle Hill and Billinge Beacon	-	76 45	19,75 24,5 26,5	23,5
Wittle Hill and Rivington Hill	-	56 46	54,75 56 58,25 60	57,25

*At Wittle Hill.*

Billinge Beacon and Knoll Hill	-	98 54	55,5 58 57,75 58,75 62	58,5
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# Trigonometrical Survey.

Between				Mean.
Billinge Beacon and Mow Copt	-	62 46	17,5 18,5 20,75	19
Billinge Beacon and Bleasdale Forest	-	80 23	3,5 6,5 7 10,75	7,5
Billinge Beacon and Chorley Down	-	80 43	16,75 18 20,25 21,25	19
Billinge Beacon and Rivington Hill	-	16 41	44 45 45,5	45
Pendle Beacon and Bleasdale Forest	-	34 46	30 31,5 34,5	32
Pendle Beacon and Boulsworth Hill	-	37 17	21,5 21,5 22,5 26,75	23
Boulsworth Hill and Holme Moss	-	87 16	40,25 40,5 41 42,75	40,75
Axedge and Holme Moss	-	37 7	29,5	
Axedge and Mow Copt	-	20 22	26,75	
Billinge Beacon and St. Mary's Spire, Manchester	-	62 44	7,35 14,75	11
At Axedge.				
Weaver Hill and Mow Copt	-	67 17	54,5 57,5 59,75	56

een				Mean.
Mow Copt and Wittle Hill	-	-	103 0 82	

*At Beryl Hill.*

Black Comb and Bleasdale Forest	-	-	94 28 39.75	} 40.25
			40	
			41.25	
Go Hill and Ashurst Beacon	-	-	16 4 39.25	} 40
			40	
			40.5	
Go Hill and Bleasdale Forest	-	-	91 29 53	} 55.5
			58	
Go Hill and Billinge Beacon	-	-	14 24 28	} 30.75
			33.5	

*At The Calf.*

Ingleborough Hill and Black Comb.	-	-	95 56 11.75	} 12.25
			12.25	
			12.25	
			12.5	
Black Comb and Helvellin Mountain	-	-	41 19 32.25	} 33
			34	
Cross Fell and Helvellin Mountain	-	-	63 59 19	} 16
			17	
			11.75	
Ingleborough Hill and Shunnor Fell	-	-	72 31 15	} 16
			16.25	
			17	
Black Comb and Lower Top of Sca-Fell	-	-	23 49 59.75	} 39.25
Cross Fell and Shunnor Fell	-	-	86 13 36	
			39.25	
			42.75	
Penrith Beacon and Cross Fell	-	-	26 5 54.75	} 56
			55.25	
			57.75	

# Trigonometrical Survey.

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Between

Black Comb and Coniston Fell	18	22	35	} 37
			36	
			40	
Penrith Beacon and High Pike	19	31	4.25	} 5.25
			4.75	
			7	

At Black Comb.

Ingleborough Hill and Bleasdale Forest	30	5	29.75	} 35
			36	
			36.5	
			37.75	
Ingleborough Hill and The Calf	22	28	15	} 19
			19.75	
			19.75	
			21	
Ingleborough Hill and Helvellin Mountain	65	15	42.75	} 43.5
			43.5	
			44	
Ingleborough Hill and Coniston Fell	52	11	24.5	} 26
			24.5	
			27.5	
			27.5	
Ingleborough Hill and Lower Top of Sca-Fell	81	25	35.5	
The Calf and Coniston Fell	29	43	4.75	} 7
			5.5	
			6.5	
			8.25	
			9	
North Berule and Snea Fell, in the Isle of Man	2	28	48.75	} 49
			49.25	
Bleasdale Forest and Bodafon Fire Beacon				
in Anglesea	82	14	33.5	
Bleasdale Forest and the Top of the Rivel				
Mountain in Caernarvonshire	78	25	7.5	

*At Scilly Bank.*

Between

Mean

Black Comb and Dent Hill	-	-	13	2	45	
					44	
					46	45,75
					46,5	
					47	
North Berule and Snea Fell	-	-	0	23	11	} 13
					15	
Dent Hill and Crif-Fell	-	-	14	8	26	} 17
					18,5	
					18,5	
					14,75	

*At Dent Hill.*

Black Comb and Scilly Bank	-	-	16	3	27	31,25	} 33
						33,25	
						34,75	
Black Comb and Sca-Fell, highest top	-	-	5	2	17	49	} 51
						52	
						53,25	
The two summits of Sca-Fell	-	-	3	3	3	48,5	} 49,25
						49,75	
						50,25	

*At Wordeslow Hill.*

Brandon Down and Pontop Pike			38	50		55,5	} 58
						56,25	
						56	
						57	
						61	
						61,25	
Brandon Down and Collier Law			19	6		42	} 42,25
						42,5	
Brandon Down and Hedgehope			91	29		18,5	} 20,75
						20,5	
						22	
						22	

# Trigonometrical Survey.

Between

Brandon Down and Flagstaff on Sheriff Hill 76 45 8 } 6

## At Pontop Pike.

Wordeslow Hill and Simonside Hill - 111 2 55,95 }  
 57,5 } 57,75  
 58,75 }  
 58,75 }

Wordeslow Hill and Brandon Down - 59 47 18 }  
 19 } 19,75  
 20 }  
 21,75 }

Collier Law and Brandon Down - 74 53 55,5

Wordeslow Hill and Signal Staff on Marston Hill near Sunderland - 30 9 48 } 50  
 52 }

## At Collier Law.

Wordeslow Hill and Simonside Hill - 75 12 27 }  
 27,5 } 28  
 28,25 }  
 30 }

Pontop Pike and Brandon Down - 44 47 7,75 }  
 7,75 } 10  
 8,25 }  
 10,75 }  
 11,5 }  
 13 }

Wordeslow Hill and Pontop Pike - 25 34 17,25 }  
 19 } 19  
 20,75 }

Cross Fell and Kilhope Law - 21 34 43 }  
 43,5 } 44  
 44 }  
 44,5 }  
 45,75 }

					Mean.
Cross Fell and Water Crag	-	-	64	2	0
					0,25
Cross Fell and The Cheviot	-	-	95	1	9,75
					10,75
					13,5
Cross Fell and Simonside Hill	-	-	103	33	19,75
					24
					24,5

*At Water Crag.*

Cross Fell and Collier Law	-	-	52	19	52,5
					53
					54,5
					54,75
Black Hambleton and Great Whernside	-	-	62	22	45,5
					47,5
Black Hambleton and Brandon Down	-	-	66	3	10,25
					13
Collier Law and Helvellin Mountain	-	-	93	3	8,5
					10,5
Collier Law and Kilhope Law	-	-	28	17	50
					50,25
					52,5
Cross Fell and Shunnor Fell	-	-	93	12	25,25
					28,25
Shunnor Fell and Great Whernside	-	-	61	1	26,5
					28,5
					30

*At Cross Fell.*

Water Crag and Helvellin Mountain	-	-	99	59	21
					22
Collier Law and The Cheviot	-	-	62	47	30,25
					34,75

# Trigonometrical Survey.

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Between

The Calf and High Pike	-	87	59	9,25	11,5	10,5
The Calf and Helvelling Mountain	-	57	48	21,25	27,5	24,5
Water Crag and Shunnor Fell	-	15	35	33,75	36,75	36
Skiddaw and High Pike	-	8	3	8,5	9,75	9
The Cheviot and Wisp Hill	-	39	15	47,75	48,5	48,75
The Cheviot and Simonside Hill	-	13	11	5,75	6	7

At High Pike.

Cross Fell and Wisp Hill	-	85	1	54,5	56,25	55,5
Cross Fell and Crif-Fell	-	144	22	9,5	11,75	10,5

At Alnwick Moor.

Rufflaw and Simonside Hill	-	40	34	53,25	53,75	54
The Cheviot and Rufflaw	-	106	58	54,5	55,75	56

At Rufflaw.

Collier Law and Simonside Hill	-	103	32	28	31,75	30
The Cheviot and Collier Law	-	124	36	49,5	50	49,75



Between					Mean.
Alnwick Moor and The Cheviot	-	38	55	41,25 41,25 42,75 42,75	42
Alnwick Moor and Simonside Hill	-	60	0	5 5,5 6,25	5,5
Collier Law and Pontop Pike	-	14	52	49,5 53,5	51,5
<i>At Crif-Fell.</i>					
Scilly Bank and Skiddaw	-	38	11	47,75 48,25	48
Cross Fell and Wisp Hill	-	61	49	33,75 37 37,25	36
Wisp Hill and Queensberry Hill		44	6	37 39 43	39,75
Cross Fell and Helvellin Mountain	-	29	52	15 20,5 21,75	19
Skiddaw and Dent Hill	-	33	24	18,5	
Skiddaw and High Pike	-	10	37	34,25 35,5	35
Cross Fell and Skiddaw	-	26	26	10,25 11,25 12	11,25
<i>At Wisp Hill.</i>					
The Cheviot and Cross Fell	-	87	14	7 10,75	9
The Cheviot and Sayrs Law	-	50	36	13,25 16,25 18,75	16

Mean.

Between					
The Dunrigs and Sayrs Law	-	-	39 42	50,5 50,5 53,5 56	} 52,5
The Cheviot and Crif-Fell	-	-	160 55	36,75 38,75 40,75	} 38,75
Crif-Fell and Queensberry Hill	-		41 42	31,25 34,5 35,5	} 33,75

*At Sayrs Law.*

Wisp Hill and The Cheviot	-	-	55 50	17,25 17,25 18,5 20	} 18,25
Wisp Hill and The Dunrigs	-	-	30 1	38 39,25 40 41,25	} 39,5
The Cheviot and East Lomond Hill	-		178 40	19,25 20,5 21,75 22 27,25	} 22,25
The Cheviot and Mordington Hill	-		44 34	25,75 27 28,75	} 27,25
Lighthouse on the Isle of May and Light-house on Inch Keith	-	-	64 55	17,25 21,5	} 19,5
Lighthouse on the Isle of May and Light-house on Leith Pier	-	-	75 4	33,5	
Lighthouse on the Isle of May and Kirk Gate Spire, Leith	-	-	76 25 21		

*At Lumsdane Hill.*

Between		°	'	"	Mean.
Sayrs Law and Blackheddon	/	107	25	26,25	} 29,5
				28,25	
				29,75	
				30	
				33,5	
Sayrs Law and East Lomond Hill		43	48	40	} 42
				42,25	
				43,75	
Largo Law and Sayrs Law	-	52	11	52,5	} 55,5
				53,75	
				55	
				57,75	
				58,75	
Sayrs Law and West Lomond Hill		42	18	9,5	} 11,5
				10	
				15,25	
The Cheviot and Blackheddon		25	40	40	} 44
				45,75	
				46,5	

*At Mordington Hill.*

The Cheviot and Sayrs Law	-	89	34	0,25	} 2,75
				3,75	
				4,25	
The Cheviot and Blackheddon		32	42	59	} 60,25
				59,5	
				58,5	
				60	
				60,5	
				60,75	
				63,5	
Blackheddon and Sayrs Law	-	122	17	2	} 3
				3,5	
				3,75	

*At Blackheddon.*

Between				Mean.
Lumsdane Hill and The Cheviot	-	112 24	35 35,5 37 38 41	} 37,25
Mordington Hill and The Cheviot	-	117 9	53 59 62,5	} 58,25
The Cheviot and Saynes Law	-	79 15	28,5 28,5 30	} 29
The Cheviot and Simonside Hill	-	34 20	49 51,5 55 55,75	} 53

ART. II. *Angles of Elevation or Depression of the several Stations in the preceding Article; also the Angles of Elevation of several remarkable Hills or Mountains, observed in the Trigonometrical Survey of 1800, 1801, 1803, 1804, 1805, 1806, 1807, 1808, and 1809.*

*At Holland Hill.*

The ground at		
Stathern Point	-	depr. 5 15
Sutton Ashfield Station	-	elev. 7 12
Orpit Heights	-	elev. 12 0
Bardon Hill	-	elev. 2 35

*At Orpit Heights.*

Hathersage	-	elev. 6 18
Sutton Ashfield Station	-	depr. 24 0
Holland Hill	-	depr. 24 50
Weaver Hill	-	elev. 3 22
Bardon Hill	-	depr. 13 40
Castle Ring	-	depr. 22 15

*At Castle Ring.*

The ground at		
Axedge	-	elev. 5 54
Brayding Hill, N. Wales	-	depr. 11 50
The Wrekin	-	elev. 3 12
Weaver Hill	-	elev. 4 5
Orpit Heights	-	depr. 5 30
Bar Beacon	-	depr. 7 48
Red Clay Hill	-	elev. 7 9
Bardon Hill	-	depr. 6 48

*At Lilleybos.*

Tharfield	-	depr. 6 19
Kinsworth	-	elev. 9 50

## The ground at

Bowbrickhill	-	depr.	7 45
Lidlington	-	depr.	16 0

*At Royston.*

Lilleyhoe	-	elev.	1 39
Lidlington	-	depr.	7 57
Tharfield	-	elev.	56 33
Orwell	-	depr.	18 27
Maddingly	-	depr.	17 33
Top of Ely Minster Steeple		depr.	14 24
Top of King's College Chapel		depr.	17 45
Top of the Vane in the midst of the Trees on Gog Magog Hills		depr.	11 42

*At Orwell.*

Top of Tharfield Church Tower		elev.	17 41
Royston	-	elev.	10 18
Balsham Church Tower	-	elev.	3 15
Balsham Station	-	0 0	
Maddingly Station	-	depr.	10 18
Lilleyhoe	-	elev.	3 6

*At Maddingly.*

Tharfield	-	elev.	11 2
Orwell	-	elev.	4 31
Balsham	-	elev.	5 18
Haddenham	-	depr.	20 25

*At Balsbam.*

Tharfield	-	depr.	5 12
Newmarket Station	-	depr.	6 51

*At Brandon.*

Methwold	-	depr.	8 30
Little Port	-	depr.	10 36
Ely Minster Steeple, Top of		depr.	0 57
Newmarket	-	depr.	0 24
Bartenham	-	depr.	0 11
Thetford	-	depr.	2 37
Gorborough	-	depr.	4 30

*At Clifton Beacon.*

The ground at		elev.	29 12
Hathersage	-	elev.	28 10
Bradfield Point	-	depr.	1 45
Staincross Heights	-	depr.	13 40
Gringley Beacon	-	depr.	32 57
North end of the Base	} Carr.	depr.	28 51
South end of ditto			

*At Hathersage.*

Orpit Heights	-	depr.	20 27
Ravage Top	-	depr.	11 1
Lord's Seat	-	elev.	23 45
Black-kilder Hill	-	elev.	33 9
Pit Hill	-	elev.	23 51
Bradfield Point	-	depr.	14 12
Staincross Heights	-	depr.	38 7

*At Lord's Seat.*

Weaver Hill	-	depr.	26 27
Ravage Top	-	depr.	28 29
Axedge	-	depr.	5 26
Pit Hill	-	depr.	4 32
Hathersage	-	depr.	29 48
Black-kilder Hill	-	elev.	56 30

*At Weaver Hill.*

The Wrekin	-	depr.	11 24
Castle Ring	-	depr.	20 8
Bardon Hill	-	depr.	17 26
Orpit Heights	-	depr.	13 21
Barren-Edge	-	elev.	2 14
Pit Hill	-	elev.	0 30
Black-kilder Hill	-	elev.	12 51
Axedge	-	elev.	18 56
Mow Copt	-	depr.	10 51
Ashley Heath	-	depr.	21 15
Lord's Seat	-	elev.	7 45

*At Cleave.*

Malvern Hills, highest point		elev.	3 17
Breadon Hill	-	depr.	11 0
Broadway Beacon	-	depr.	7 30
Stow on the Wold	-	depr.	19 28

The ground at  
May Hill

depr. 11 15

*At Malvern Station.*

Cradle Mountain, Wales	-	elev. 5 30
Brown Clay Hill	-	depr. 0 20
Broadway Beacon	-	depr. 18 36
Breadon Hill (Building)	-	depr. 26 45
Cleeve Hill	-	depr. 17 20
May Hill	-	depr. 23 30

*At May Hill.*

Malvern Station	-	elev. 11 12
Breadon Hill (Building)	-	depr. 7 38
Broadway Beacon	-	depr. 8 56
Cleeve Hill	-	depr. 3 57
Symmond's Hall	-	depr. 12 15
Trelleg Beacon	-	depr. 4 6

*At Trelleg Beacon.*

Mynydd Mane	-	elev. 14 45
Cradle Mountain	-	elev. 37 6
Symmond's Hall	-	depr. 17 25
May Hill	-	depr. 8 2

*At Mynydd Mane.*

Capellante	-	elev. 16 3
Beacon of Brecknock	-	elev. 32 39
Cradle Mountain	-	elev. 28 0
Trelleg Beacon	-	depr. 26 51
Tymbarlum Mountain	-	depr. 35 54
Garth Hill	-	depr. 32 0
Llangeinor Mountain	-	elev. 1 56
Dundry Beacon	-	depr. 29 3

*At Garth Hill.*

Capellante	-	elev. 29 18
Beacons of Brecknock	-	elev. 41 39
Cradle Mountain	-	elev. 24 18
Mynydd Mane	-	elev. 21 27
Dunkery Beacon	-	elev. 5 4
Ogmoor Down	-	depr. 35 39
Llangeinor Mountain	-	elev. 35 35

*At Ogmoor Down.*

The ground at		
Llangeinor Mountain	-	elev. 51 9
Garth Hill	-	elev. 26 9
Dunkery Beacon	-	elev. 33 45
Cefn Bryn	-	depr. 1 51

*At Llangeinor Mountain.*

Margam Down	-	depr. 34 24
Trecastle Beacon	-	elev. 20 3
Cradle Mountain	-	elev. 5 30
Pen y Voel	-	depr. 8 57
Mynydd Mane	-	depr. 17 54
Garth Hill	-	depr. 46 57
Capellante	-	elev. 15 41
Dunkery Beacon	-	depr. 15 55
Beacons of Brecknock	-	elev. 31 0

*At Margam Down.*

Lannon	-	depr. 14 45
Llangeinor Mountain	-	elev. 10 7 21
Ogmoor Down	-	depr. 59 24
Dunkery Beacon	-	elev. 1 48

*At Cefn Bryn.*

Lannon	-	elev. 13 4
Trecastle Beacon	-	elev. 36 55
Llangeinor Mountain	-	elev. 25 6
Margam Down	-	elev. 11 9
Precelly Top	-	elev. 6 12
Dunkery Beacon	-	elev. 5 9
Marros Beacon	-	depr. 12 19
Hangman Hill	-	elev. 1 2
Brenin Vour	-	0 0
Ogmoor Down	-	depr. 16 48

*At Marros Beacon.*

Cefn Bryn	-	depr. 6 19
Lannon	-	elev. 6 36
Precelly Top	-	elev. 44 15

*At Lannon.*

Cefn Bryn	-	depr. 19 45
Marros Beacon	-	depr. 19 45

The ground at			
Precelly Top	-	elev.	9 16
Brenin Vour	-	depr.	0 54
New Inn Hill Station	-	elev.	3 10
Trecastle Beacon	-	elev.	44 0
Llangainor Mountain	-	elev.	13 4
Margam Down	-	depr.	3 25
Beacons of Brecknock	-	elev.	27 43

*At Precelly Top.*

Beacons of Brecknock	-	depr.	9 20
Trecastle Beacon	-	depr.	5 15
Lannon	-	depr.	29 30
Brenin Vour	-	depr.	45 39

*At Plumstone Down.*

St. David's Head	-	depr.	3 43
Pencar Rock near Fishguard		elev.	3 33
Cwm Kerrwn Mountain	-	elev.	50 30
Precelly Top	-	elev.	55 33
St. Ann's Hill	-	depr.	21 12

*At St. Ann's Hill.*

Top of Milford Church Steeple	depr.	10	24
Summit of Sir H. Owen's Gazebo	elev.	2	28
Top of Warren Church Spire	elev.	2	30
Cupola of St. Ann's Lighthouse	depr	28	14
Highest Part of Ramsey Isle	depr.	1	27
Plumstone Down	-	-	Elev. 11 51
Precelly Top	-	-	elev. 1° 1 33

*At Newton Down.*

St. Ann's Head	-	depr.	9 39
Plumstone Down	-	elev.	11 48
St. David's Head	-	elev.	1 48
Precelly Top	-	elev.	53 16
Marros Beacon	-	elev.	4 3
Highgate Mountain	-	depr.	5 55

*At New Inn Hill.*

Lannon	-	depr.	15 56
Precelly Top	-	elev.	6 53
Brenin Vour	-	depr.	1 29
Capel Kynon	-	depr.	12 23

The ground at			
Talsarn Hill	-	depr.	8 30
Beacons of Brecknock	-	elev.	22 8

*At Talsarn Hill.*

Tregarron Down	-	elev.	28 11
Llandow Mountain	-	elev.	22 57
Trecastle Beacon	-	elev.	20 58
New Inn Hill	-	depr.	5 8
Brenin Vour	-	depr.	5 50
Precelly Top	-	elev.	0 10
Capel Kynon	-	depr.	10 44
Tregarron Down	-	elev.	28 15
Plynlimmon	-	elev.	29 15
Aberystwith Station	-	depr.	33 41
Cader Idris	-	elev.	21 6

*At Capel Kynon.*

New Inn Hill	-	elev.	2 50
Brenin Vour	-	elev.	5 57
Precelly Top	-	elev.	14 13
Tregarron Down	-	elev.	7 27
Plynlimmon	-	elev.	12 38

*At Tregarron Down.*

Plynlimmon	-	elev.	20 18
Dwggan Mountain	-	elev.	23 36
Beacons of Brecknock	-	elev.	12 25
Trecastle Beacon	-	elev.	12 30
Talsarn Hill	-	depr.	39 27
Aberystwith Station	-	depr.	57 27
Snowdon	-	depr.	2 21
Cader Idris	-	elev.	9 13
Plynlimmon	-	elev.	20 30
Llandow Mountain	-	depr.	20 44
Barrow near New Inn	-	depr.	22 41
Talsarn Hill	-	depr.	38 0
Capellante	-	elev.	2 36
Precelly Top	-	depr.	17 15
Cradle Mountain	-	elev.	2 18
Llandinam Mountain	-	depr.	4 40

*At Aberystwith Station.*

Brigny Hill	-	elev.	27 27
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The ground at		
Plynlimmon	-	elev. 1° 38 50
Cader Idris	-	elev. 1 12 25
Pengarn	-	elev. 32 7
Snowdon	-	elev. 28 52
Rhiw Mountain	-	depr. 3 42
Tregarion Down	-	elev. 41 58
Talsarn Hill	-	elev. 21 58

*At Llandinam Mountain.*

Dwggan Mountain	-	0 0
Tregarion Down	-	depr. 13 6
Plynlimmon	-	elev. 19 22
Arrian Fowddy	-	elev. 15 9
Long Mountain	-	depr. 26 1
Stow Hill	-	depr. 24 7
Radnor Forest	-	elev. 5 3
Cradle Mountain	-	elev. 2 22
Beacon of Brecknock	-	elev. 3 27
Capellante Mountain	-	depr. 6 21
Cader Idris	-	elev. 14 21
Brown Clay Hill	-	depr. 14 21

*At Stow Hill.*

Radnor Forest	-	elev. 42 6
The Beacon of Brecknock	-	elev. 11 0
Llandinam Mountain	-	elev. 9 33
Long Mount Pole	-	elev. 7 11
Malvern Station	-	depr. 13 57
The Wiclin	-	depr. 12 30
Brown Clay Hill	-	elev. 5 32
Long Mountain	-	depr. 10 0
Cradle Mountain	-	elev. 16 19

*At Radnor Forest.*

Cradle Mountain	-	elev. 4 0
Trecastle Beacon	-	depr. 5 41
Beacon of Brecknock	-	elev. 4 15
Capellante Mountain	-	depr. 8 20
Dwggan Mountain	-	depr. 12 0
Malvern Station	-	depr. 27 45
Llandinam Mountain	-	depr. 17 15

*At Symond's Hall.*

The ground at		
Malvern Station	-	elev. 0 56
St. Ann's Hill	-	depr. 6 48
May Hill	-	depr. 0 49
Trelleg Beacon	-	depr. 0 9

*At Rbiw Mountain.*

Rivel Mountain	-	elev. 38 33
Bwlch Mawr	-	elev. 19 9
Snowdon	-	elev. 48 4
Ynaliog Mountain	-	depr. 50 18
Holyhead Mountain	-	depr. 18 0
Llwydiart Mountain	-	depr. 22 32

*At Llwydiart Mountain.*

Llanelian Mountain	-	elev. 0 26
Great Orme's Head	-	elev. 1 56
Penmaen Mawr	-	elev. 1° 2 21
Carnedd Llewellyn	-	elev. 2 29 21
Carnedd David	-	elev. 2 28 29
Snowdon	-	elev. 1 59 45
Gerwyn Goch	-	elev. 27 44
Rivel Mountain	-	elev. 27 44
Holyhead Mountain	-	depr. 1 39
Moel Rhyddlad	-	depr. 9 18
Ynaliog Mountain	-	depr. 13 22
Rhiw Mountain	-	depr. 5 29
Bwlch Mawr	-	elev. 28 15

*At Llanelian Mountain in Anglesea.*

Snowdon	-	elev. 1° 8 59
Carnedd David	-	elev. 1 18 10
Carnedd Llewellyn	-	elev. 1 19 44
Penmaen Mawr	-	elev. 29 9
Llanelian Mountain	-	elev. 3 6
Bwlch Mawr	-	elev. 15 23
Gerwyn Goch	-	elev. 15 23
Rivel Mountain	-	elev. 16 21
Great Orme's Head	-	depr. 5 12
Llwydiart Mountain	-	depr. 8 30
Holyhead Mountain	-	depr. 1 24
Moel Rhyddlad	-	depr. 11 57
A Mountain in Cumberland	-	depr. 10 33



The ground at		
A sharp-pointed Mountain near		
the last	-	depr. 13 6
Southwest Mountain in the Isle		
of Man	-	depr. 8 47
Northeast Mountain in the Isle		
of Man	-	depr. 7 33

*At Moel Rbyddlad.*

Llanelian Mountain	-	elev. 2 26
Bodafon Beacon	-	elev. 2 5
Carnedd Llewellyn	-	elev. 58 34
Carnedd David	-	elev. 58 40
Snowdon	-	elev. 58 10
Bwlch Mawr	-	elev. 18 23
Gerwyn Goch	-	elev. 19 20
Rivel Mountain	-	elev. 21 15
Hill near Nevin	-	elev. 1 55
Holyhead Mountain	-	elev. 20 51
Penmaen Mawr	-	elev. 16 55
Great Orme's Head	-	depr. 6 0
Llwydiart Mountain	-	depr. 4 24
Rhiw Mountain	-	depr. 5 11
Ynaliog Mountain	-	depr. 12 36

*At Plynlimmon.*

Cader Idris	-	elev. 11 0
Arrennig	-	depr. 5 5
Radnor Forest	-	depr. 14 57
Llandinam Mountain	-	depr. 30 15
Tregarron Down	-	depr. 34 9
Rodney's Pillar	-	depr. 37 3
Aberystwith Station	-	depr. 10 47 55
Berwin Mountain	-	depr. 7 30
Ynaliog Mountain	-	depr. 42 30
Rhiw Mountain	-	depr. 38 57
Rivel Mountain	-	depr. 25 45
Arran Fowddy	-	elev. 5 51

*At Long Mountain.*

Radnor Forest	-	elev. 10 3
Llandinam Mountain	-	elev. 9 12
Arran Fowddy	-	elev. 29 1
Arrennig	-	elev. 16 3

The ground at		
Berwin Mountain	-	elev. 36 48
Cader Ferwyn	-	elev. 29 28
Cyrn Moelfre	-	elev. 10 7
Cader Idris	-	elev. 16 37
Stow Hill	-	depr. 4 56
Rodney's Pillar	-	depr. 18 15
Ash cy Heath	-	depr. 23 18
The Wrekin	-	depr. 8 27
Cyrn y Brain Mountain	-	elev. 1 42

*At Brown Clay Hill.*

Bar Beacon	-	depr. 34 10
Malvern Station	-	depr. 20 12
Waltham Hill	-	depr. 30 54
The Wrekin	-	depr. 27 29
Long Mount Pole	-	depr. 10 9
Stow Hill	-	depr. 20 30
Rodney's Pillar	-	depr. 23 53
Ashley Heath	-	depr. 32 21

*At Ashley Heath.*

Highest Part of Beeston Castle	-	depr. 15 21
Delamere Forest	-	depr. 14 41
Mow Copt	-	elev. 7 48
The Wrekin	-	elev. 11 46
Long Mount Pole	-	elev. 5 27
Long Mountain	-	depr. 2 54
Rodney's Pillar	-	depr. 2 54
Highest Point of Hawkeston		
Obelisk	-	depr. 3 51
Brown Clay Hill	-	elev. 8 15
Cyrn y Brain Mountain	-	elev. 7 24
Weaver Hill	-	elev. 4 9

*At Cyrn y Brain Mountain.*

Arran Fowddy	-	elev. 16 4
Arrennig	-	elev. 15 21
Carnedd David	-	elev. 16 27
Carnedd Llewellyn	-	elev. 18 44
Cader Ferwyn	-	elev. 32 46
Snowdon	-	elev. 15 33
Delamere Forest	-	depr. 43 12
Ashley Heath	-	depr. 33 0

The ground at	
Rodney's Pillar	depr. 27 12
Long Mountain	depr. 22 24
Long Mount Pole	depr. 16 28
The Wrekin	depr. 22 54
Moel Fammau	depr. 4 23
Llanellian Mountain	depr. 27 39

*At Llanellian Mountain in Denbighshire.*

Arrennig	elev. 48 12
Cader Ferwyn	elev. 22 33
Cyrn y Brain Mountain	elev. 7 3
Moel Fammau	elev. 14 30
Llanellian Mountain	depr. 22 59
Garreg Mountain	depr. 17 35
Billinge Beacon	depr. 24 15
Great Orme's Head	depr. 40 57

*At Garreg Mountain.*

Snowdon	elev. 36 58
Denbighshire, Llanellian Mountain	elev. 3
Anglesca, Llanellian Mountain	depr. 18
Great Orme's Head	depr. 12
Arrennig	elev. 28
Arran Fowddy	elev. 25
Cyrn y Brain Mountain	elev. 29
Delamere Forest	depr. 14
Moel Fammau	elev. 10 3

*At West End of Base.*

Moelfre Issa	elev. 30 16
Cave Hill	elev. 3 27
Great Orme's Head	elev. 32
Gwaunysgaer Down	elev. 51
Top of Staff at East End of Base	depr. 0

*At East End of Base.*

Moel Morwith	elev. 45
Moel Fammau	elev. 10 26
Moelfre Issa	elev. 2 9
Great Orme's Head	elev. 12
Gwaunysgaer Down	elev. 46
Top of Staff at West End of Base	depr. 0

*At Moelfre Issa.*

The ground at	
Moel Fammau	elev. 30 15
Llanellian Mountain	elev. 15 15
Cyrn y Brain Mountain	elev. 16 21
Top of Staff at West End of Base	depr. 30 41 54
Top of Staff at East End of Base	depr. 2 46 2
Gwaunysgaer Down	depr. 24 6

*At Gwaunysgaer Down.*

Moel Fammau	elev. 51 12
Moelfre Issa	elev. 20 4

*At Burleigh Moor.*

Barnaby Moor	elev. 41 35
Roseberry Top	elev. 59 16
Wordslow Hill	depr. 6 51
Easington Heights	elev. 7 12
Danby Beacon	elev. 23 36
Brandon Mount	depr. 2 47

*At Easington Heights.*

Fair Head	elev. 10 27
Danby Beacon	elev. 26 15
Blackhill Stone	elev. 34 9
Botton Head	elev. 30 6
Barrow on Gisbro' Hill	elev. 25 30
Barnaby Moor	elev. 1 27
Stow Brow	depr. 1 28

*At Botton Head.*

Barnaby Moor	depr. 47 30
Westerdale	depr. 19 40
Loosehoe	depr. 10 31
Hambleton Down	depr. 26 45
Easington Heights	depr. 40 50

*At Loosehoe.*

Botton Head	elev. 3 15
Westerdale	depr. 1 9
Roseberry Top	depr. 27 48
Easington Heights	depr. 44 15

The ground at			The ground at		
Fair Head	-	depr. 33 54	Rivington Hill	-	elev. 41 21
Stow Brow	-	depr. 27 54	Billinge Beacon	-	elev. 20 21
Wilton Beacon	-	depr. 23 30	Heswell Hill	-	depr. 2 28
Hambleton Down	-	depr. 21 47	Beryl Hill	-	depr. 11 52
<i>At Wilton Beacon.</i>			Pendle Hill	-	elev. 18 57
Kirby Underdale	-	0 0	<i>At Wittle Hill.</i>		
Bottom Head	-	elev. 2 53	Knoll Hill	-	depr. 1° 4 27
Loosehoe	-	elev. 3 30	Holme Moss	-	elev. 5 1
Hambleton Down	-	depr. 3 37	Boulsworth Hill	-	elev. 2 51
Hunsley Beacon	-	depr. 17 29	Pendle Hill	-	elev. 7 33
<i>At Heswell Hill.</i>			Ingleborough	-	elev. 1 39
Cyrn y Brain Mountain	-	elev. 38 28	Bleasdale Forest	-	depr. 1 39
Go Hill Station	-	depr. 10 57	Chorley Down	-	depr. 21 36
Billinge Beacon	-	depr. 6 38	Rivington Hill	-	depr. 7 12
Belle-field Hill	-	depr. 9 11	Billinge Beacon	-	depr. 37 28
Delamere Forest	-	depr. 1 52	Mow Copt	-	depr. 22 42
<i>At Belle-field Hill.</i>			Axedge	-	depr. 7 48
Cyrn y Brain Mountain	-	elev. 17 1	<i>At Axedge.</i>		
Delamere Forest	-	elev. 10 21	Rivington Hill	-	depr. 19 7
Mow Copt	-	elev. 13 29	Wittle Hill	-	depr. 17 31
Billinge Beacon	-	depr. 20 50	Holme Moss	-	depr. 4 40
Heswell Hill	-	depr. 7 48	Lord's Seat Station	-	depr. 3 53
Rivington Hill	-	elev. 32 5	Hathersage	-	depr. 19 48
Knoll Hill	-	elev. 9 37	Weaver Hill	-	depr. 30 23
<i>At Billinge Beacon.</i>			Mow Copt	-	depr. 39 41
Rivington Hill	-	elev. 45 7	<i>At Staineros Heights.</i>		
Chorley Down	-	elev. 27 15	Bradfield Point	-	elev. 39 48
Delamere Forest	-	depr. 8 45	Holme Moss	-	elev. 49 52
Knoll Hill	-	elev. 15 3	Ledstone Beacon	-	depr. 17 20
Cyrn y Brain Mountain	-	elev. 7 22	Clifton Beacon	-	depr. 10 3
Belle-field Hill	-	depr. 15 37	Hathersage	-	elev. 24 54
Heswell Hill	-	depr. 15 16	Rumbles Moor	-	elev. 6 4
Garreg Mountain	-	depr. 5 36	<i>At Boulsworth Hill.</i>		
Go Hill Station	-	depr. 28 9	Ingleborough	-	elev. 5 35
Beryl Hill	-	depr. 23 7	Cam Fell	-	elev. 3 59
<i>At Go Hill.</i>			Great Whernside	-	elev. 6 32
Bleasdale Forest	-	elev. 19 24	Rumbles Moor	-	depr. 24 42
Chorley Down	-	elev. 31 36	Holme Moss	-	elev. 5 18
			Wittle Hill	-	depr. 24 42

The ground at		
Rivington Hill	-	depr. 14 40
Bleasdale Forest	- -	depr. 9 3
Pendle Hill	- -	elev. 6 12

*At Ingleborough Hill.*

Coniston Fell	- -	depr. 8 11
Black Comb	- -	depr. 22 24
Helvellin Mountain	-	depr. 0 53
The Calf	- -	depr. 13 50
Whernside in Ingleton Fells	-	elev. 2 21
Shunnor Fell	- -	depr. 8 15
Great Whernside	- -	depr. 9 35
Pennigant	- -	depr. 13 0
Pendle Hill	- -	depr. 25 20
Bleasdale Forest	- -	depr. 31 4
Boulsworth Hill	- -	depr. 27 26

*At Rumbles Moor.*

Black Hambleton	-	depr. 15 44
Hambleton Down	-	depr. 17 15
Ledstone Beacon	-	depr. 38 41
Bradfield Point	- -	depr. 13 8
Holme Moss	- -	elev. 5 2
Boulsworth Hill	- -	elev. 13 12
Pendle Hill	- -	elev. 9 5
Cam Fell	- -	elev. 18 39
Great Whernside	-	elev. 25 34
Pennigant	- -	elev. 15 24

*At Ledstone Beacon.*

Hambleton Down	-	elev. 2 50
Wilton Beacon	-	elev. 0 3
Rumbles Moor	- -	elev. 20 36
Staincross Heights	-	elev. 3 18

*At Black Hambleton.*

Collier Law	- -	depr. 9 24
Great Whernside	- -	elev. 9 30
Water Crag	- -	elev. 3 26
Cross Fell	- -	elev. 0 15
Rumbles Moor	-	depr. 13 12
Ledstone Beacon	-	depr. 30 42
Hambleton Down	-	depr. 28 24

The ground at		
Wilton Beacon	-	depr. 22 2
Botton Head	- -	elev. 12 45

*At Hambleton Down.*

Wilton Beacon	- -	depr. 17 5
Botton Head	- -	elev. 17 6
A Hill near Stokesley	-	elev. 14 12
Black Hambleton	- -	elev. 22 15
Water Crag	- -	elev. 2 18
Rumbles Moor	- -	depr. 8 44
Ledstone Beacon	-	depr. 28 12
Great Whernside	-	elev. 12 0

*At Brandon Down.*

Collier Law	- -	elev. 38 45
Pontop Pike	- -	elev. 6 51
Hambleton Down	-	depr. 7 59
A Hill near Stokesley	-	depr. 0 15
Botton Head	- -	depr. 1 14
Burleigh Moor	-	depr. 17 30
Easington Heights	-	depr. 17 3
Wordeslow Hill	- -	depr. 18 0
Sherf Hill	- -	depr. 21 38
Water Crag	- -	elev. 19 18

*At Wordeslow Hill.*

Botton Head	- -	elev. 3 6
Water Crag	- -	elev. 10 2
Brandon Down	-	elev. 8 2
Collier Law	- -	elev. 17 55
Pontop Pike	- -	elev. 12 22
Simonside Hill	- -	depr. 0 50
The Cheviot	- -	elev. 5 24
Hedgehope	- -	elev. 2 58
Marston Hill	- -	depr. 32 14

*At Pontop Pike.*

Simonside Hill	- -	depr. 2 48
Ruffaw	- -	depr. 20 43
Wordeslow Hill	- -	depr. 23 58
Brandon Down	-	depr. 14 56
Collier Law	- -	elev. 35 21
Kilhope Law	- -	elev. 28 6

*At Collier Law.*

The ground at			
Cross Fell	-	elev. 30	5
Kilhope Law	-	elev. 21	43
Water Crag	-	elev. 4	17
Brandon Down	-	depr. 48	42
Pontop Pike	-	depr. 44	36
Simonside Hill	-	depr. 18	1
Hedgehope	-	depr. 9	5
Wordeslow Hill	-	depr. 38	42

*At Water Crag.*

Skiddaw	-	depr. 5	54
Saddleback	-	depr. 5	50
Penrith Beacon	-	depr. 39	21
Kilhope Law	-	depr. 10	6
Collier Law	-	depr. 23	9
Brandon Down	-	depr. 41	3
Black Hambleton	-	depr. 31	42
Great Whernside	-	depr. 4	57
Whernside in Ingleton Fells	-	depr. 0	38
Shunnor Fell	-	elev. 11	6
Nine Standards	-	depr. 8	18
Cross Fell	-	elev. 10	46

*At Cross Fell.*

Helvelling Mountain	-	depr. 5	2
Skiddaw	-	depr. 7	43
The Calf	-	depr. 28	30
The Cheviot	-	depr. 23	44
Wisp Hill	-	depr. 30	48
Hedgehope	-	depr. 27	0
Simonside Hill	-	depr. 38	9
Collier Law	-	depr. 46	35
Water Crag	-	depr. 28	36
Great Whernside	-	depr. 24	43
Shunnor Fell	-	depr. 23	59
Crif-Fell	-	depr. 33	6
Bow Fell	-	depr. 11	51
High Pike	-	depr. 31	39
Saddleback	-	depr. 12	9
Grisdale Pike	-	depr. 19	54
Cold Fell	-	depr. 47	27
Daffenside Beacon	-	depr. 10	4

*At Beryl Hill.*

The ground at			
Black Comb	-	elev. 26	28
Bleasdale Forest	-	elev. 49	0
Go Hill	-	elev. 4	25
Billinge Beacon	-	elev. 0	7

*At The Calf.*

Black Comb	-	depr. 17	43
Coniston Fell	-	elev. 1	19
Helvelling Mountain	-	elev. 16	0
High Pike	-	depr. 13	8
Penrith Beacon	-	depr. 45	8
Cross Fell	-	elev. 10	31
Shunnor Fell	-	elev. 2	31
Whernside in Ingleton Fells	-	elev. 7	11
Ingleborough	-	elev. 0	34
Pennigant	-	depr. 5	6
Sca-Fell, lower Top	-	elev. 9	48
Sca-Fell, highest Top	-	elev. 11	30
Saddleback	-	elev. 3	4

*At Black Comb.*

Coniston Fell	-	elev. 33	13
Helvelling Mountain	-	elev. 24	26
Sca-Fell, lower Top	-	elev. 48	58
Sca Fell, highest Top	-	elev. 50	40
The Pillar	-	elev. 31	15
Bleasdale Forest	-	depr. 19	2
Ingleborough	-	depr. 7	25
The Calf	-	depr. 7	43
Bow Fell	-	elev. 38	23
Kirk Fell	-	elev. 20	31
Snea Fell	-	depr. 16	0
North Berule	-	depr. 17	27
Lower Cairns Moor	-	depr. 20	5
Bengarn	-	depr. 27	3
Crif-Fell	-	depr. 19	15
Scilly Bank	-	depr. 49	14

*At Scilly Bank.*

North Berule	-	elev. 7	9
Snea Fell	-	elev. 7	45
Crif-Fell	-	elev. 22	21

# Trigonometrical Survey.

The ground at			
Grasmere Fell	-	elev. 2°	3 27
Skiddaw	-	elev. 1	24 15
Black Comb	-	elev. 31	31
Bengarn	-	elev. 8	0

## At Dent Hill.

Sca-Fell, highest Top	-	elev. 1°	50 36
Sca-Fell, lower Top	-	elev. 1	51 10
Black Comb	-	elev. 21	45
Red Pike	-	elev. 1°	56 25
Blake Fell	-	elev. 1	15 42
Crif-Fell	-	elev. 2	54
Bengarn	-	depr. 9	15
Scilly Bank	-	depr. 1°	24 3
North Berule	-	depr. 3	30
Snea Fell	-	depr. 3	0
Grisdale Pike	-	elev. 1°	18 54
Grasmere Fell	-	elev. 1	46 53
Skiddaw	-	elev. 1	6 1
The Pillar	-	elev. 2	16 0

## At Crif-Fell.

Snea Fell	-	depr. 19	30
North Berule	-	depr. 20	20
Skiddaw	-	elev. 17	5
High Pike	-	depr. 3	30
Whin Fell	-	depr. 3	52
Queensberry Hill	-	elev. 2	39
The Lowthers Station	-	depr. 0	36
Cairnsmoor near Carsphairn	-	elev. 3	0
Lower Cairnsmoor Station	-	depr. 4	7
Bengarn	-	depr. 35	23
Wisp Hill	-	depr. 12	23
Cross Fell	-	depr. 4	25
Saddleback	-	elev. 8	23
Helvellin	-	elev. 7	12
Dent Hill	-	depr. 27	36

## At Wisp Hill.

Cross Fell	-	depr. 2	31
The Cheviot	-	0	0
The Dunrigs	-	elev. 5	48
Whin Fell	-	elev. 10	26

The ground at			
Queensberry Hill	-	depr. 0	50
Crif-Fell	-	depr. 15	15
Eldeh Hills, highest Point	-	depr. 25	10
Skiddaw	-	depr. 0	40
Soutra Hill	-	depr. 18	45
Sayrs Law	-	depr. 18	29

## At Sayrs Law.

Spartleton	-	depr. 30	44
Arthur's Seat	-	depr. 37	35
Pentland Station	-	depr. 12	29
Pentland Hill near Glencross	-	depr. 13	10
Soutra Hill	-	depr. 6	1
The Dunrigs	-	elev. 5	28
Elden Hills, highest Point	-	depr. 20	15
The Cheviot	-	elev. 5	51
Hedgehope	-	depr. 1	51
Wisp Hill	-	depr. 11	57
West Lomond	-	depr. 14	16
East Lomond	-	depr. 18	11
Largo Law	-	depr. 28	47

## At Lumsdane Hill.

Sayrs Law	-	elev. 28	6
Spartleton	-	elev. 31	48
Largo Law	-	depr. 9	32
The Cheviot	-	elev. 30	48
Hedgehope	-	elev. 22	15
Blackheddon	-	depr. 10	54
East Lomond	-	depr. 6	38
West Lomond	-	depr. 4	48
Cockburn Law	-	elev. 20	50
Warlaw Bank	-	elev. 13	48
Great Dirrington Law	-	elev. 21	24
Twinlaw Cairns	-	elev. 20	9
Habchester Hill	-	depr. 7	11

## At Mordington Hill.

Blackheddon	-	depr. 4	54
Roes Castle	-	elev. 3	34
Hedgehope	-	elev. 38	30
The Cheviot	-	elev. 45	37
Sayrs Law	-	elev. 21	20

The ground at			The ground at		
Habchester Hill	-	elev. 30 0	Hedgehope	-	elev. 1° 10 22
Elden Hills, highest Point	-	elev. 4 33	Simonside	-	elev. 26 59
<i>At Blackbeddon.</i>			Rufflaw	-	depr. 15 26
The Cheviot	-	elev. 1° 28 39	Roes Castle	-	elev. 13 6
Hedgehope	-	elev. 1 18 12	<i>At Rufflaw.</i>		
Simonside	-	elev. 10 11	Pontop Pike	-	elev. 2 18
Roes Castle	-	elev. 25 16	Collier Law	-	elev. 9 42
Sayrs Law	-	elev. 9 31	Wordslow Hill	-	depr. 10 6
Lumsdane Hill	-	depr. 6 14	Alnwick Moor	-	elev. 4 45
Habchester Hill	-	depr. 3 20	Hedgehope	-	elev. 43 46
<i>At Alnwick Moor.</i>			The Cheviot	-	elev. 48 33
The Cheviot	-	elev. 1° 12 18	Simonside	-	elev. 53 58

### ART. III. *Situations of the Stations.*

**Royston.** The station taking its name from this town, lies about two miles to the westward of it. There is a commanding spot of ground near the road leading to Baldock; and, upon this, between two ridges of ploughed land is the station. A large thorn bush grows on this hill, from which the station is thirty feet distant towards the termination of the ridge with the unploughed land,

**Orwell.** This station is so named from its being near to the village of Orwell in Cambridgeshire: it is about three quarters of a mile south-westward from it, and is situated on a green spot upon the highest ground at that distance from Orwell.

**Maddingly.** This station, named after the village to which it lies the nearest, is about fifty yards from a windmill, and close to the south side of the road leading to Cambridge. From Maddingly, it is about one quarter of a mile distant.

**Balsam, Cambridgeshire.** About a mile and a half from this town, towards the north, is a commanding piece of ground. It is in common fields, and has two clumps of trees growing upon it. The station is in the line joining the centre of these clumps, and may be found by setting off three hundred feet from the northern towards the southern clump.

The station near **Newmarket** is situated on a level spot of ground south-east of the town. It is two hundred and fifty yards eastward from a large, circular plantation, and nearly one hundred and fifty westward from the trough at which the race horses are watered.

**Brandon.** The station, taking its name from Brandon in Suffolk, is in the middle of the rabbit warren on the high ground south from the town. It lies in a corner formed

by the conjunction of two old walls at the distance of two hundred yards from the keeper's hut.

*Crowle* station is situated about half a mile east from the village of *Crowle* in Lincolnshire. It is on a rising ground where once stood a windmill. There is now a mill nearly two hundred feet east of this station: it can be easily found.

*Hunsley Beacon*, Yorkshire. This station is south-west from *Beverley*, and distant about seven miles. It lies southward from the road leading from *North Cave* to *Beverley*, and is also south from the *Beacon Pole*.

*Wilton Beacon*, Yorkshire. The hill on which this beacon is erected, lies a little southward of the turnpike road leading from *York* to *Bridlington*, and near the fourteenth mile stone on that road. The station is on a bank of earth, and distant from the beacon pole one hundred and fifty feet in a direction nearly south-west.

*Nunburnholme*, Yorkshire. This station is situated north-west of the village bearing that name, at a distance of nearly two miles: it is on a small common, and lies south from a barn at the distance of one hundred yards nearly.

*Loosehoe*, Yorkshire. The station is about two miles and a half north of the village called by this name. It is on a common, flat and boggy, and altogether open: it may be rather called a moor. There are not any marks on this ground to which the station can be referred.

*Greenhoe Moor*, Yorkshire. This station is on the high ground in the north of Yorkshire, being two miles north from the village of *Ingleby Greenhoe*. It is on a barrow on the highest part of this moor, and can be found very easily. That part of the moor on which the station is situated is known by the name of *Botton Head*.

*Helkinton*. This station is named from a farm to which it is near. *Helkinton Farm* is west from the village of *Cold Ashby* in Northamptonshire, and about three quarters of a mile distant. The station is in the fifth field from the village, and about sixty yards from the road, being close to the western hedge.

*Naseby Field*. The station is in the centre of the large open field, and on the highest part of it.

*Tilton on the Hill*. The station near this place is situated on a commanding spot north from the road leading to *Oakham*. It is on the fifth ridge of unploughed ground east from a stone quarry.

*Bardon Hill*, Leicestershire. *Bardon Hill* is on *Gharlwood Forest*, and between nine and ten miles from *Leicester*. The station is on the flat top of a rock seventy feet west from the summer house built on this hill.

*Statbarn Point*. The station is on the west side of this promontory, and not more than half a mile from *Statbarn* village: it is in the *Duke of Rutland's* park on a kind of bank, and nearly seventy yards from the gate.

*Holland Hill*, Nottinghamshire. This hill is about three miles from the village of



Arnold. Round the top of it is a circular ring, probably the remains of some very old military work. Outside this ring, on the northern side of it, is the station: it is in the south-west corner of a field belonging to a Mr. Jones.

*Sutton Ashfield.* The station, for brevity sake, named Sutton, lies about one mile south-east from Sutton Ashfield; it is on the brow of land terminating Sherwood Forest, and lies close to the road on its eastern side leading from Kirby to the *Red House*, which is situated by the side of the road proceeding from Sutton Ashfield to Mansfield.

*Gringley on the Hill.* Joining the east end of this village is a field, in which is a very large barrow. The centre of this barrow marks the station.

*Clifton Beacon.* This station is on the highest ground in the north-west corner of a field close to the village of Clifton near Conisbrough in Yorkshire.

*Easington Station.* This is near a village of the same name in the north-east of Yorkshire. It lies a little eastward of Lord Dundas's alum works, and in the highest part of a field close to the cliff: a stone hedge lies a little south from the station, and another west from it at a short distance. The place on which this station is situated can be easily found, as it is the highest part of the ground in this quarter.

*Burleigh Moor.* This spot lies nearly north from the town of Gisborough in Yorkshire, at a distance of three miles. It is in the grounds at Upleatham, the seat of Lord Dundas, and has an open view of the sea. On the northern part of the hill the ground slopes to the westward, and also to the northward, on which side there is a plantation. The place of the station is about thirty feet southward of the stone hedge, separating the plantation from the ploughed ground. By the favour of Lord Dundas, a high pole was left standing on the station, where it now remains.

*Symmond's Hall, Gloucestershire.* This station is west from the house bearing this name. It is about eighty yards from the eastern side of the Wooten-under-edge road, passing near Symmond's Hall, and about thirty yards from the southern wall inclosing a bowling green.

*Blagdon Hill, Somersetshire.* This is one of the hills forming the Mendip range. It lies midway between the villages of Blagdon and Cheddar, and the station is the centre of the largest barrow on the hill.

*Quantock Hills, or Bagborough Station, Somersetshire.* On the highest part of the Quantock Hills, west from Coltheston Beacon, at about two miles distant, are barrows. They are above the village of Bagborough. One of these barrows is named *Will's Neck*, and close to Will's Neck on the eastern side is the station.

*Dunkery Beacon* near Porlock in Somersetshire. On this well-known hill are two stone barrows touching each other at their bases. Close to both barrows on the western side is the station.

*Brompton Ralph, Somersetshire.* The ground west from this town rises abruptly, and on the highest part of this ground, near the slope, are the remains of an ancient quadran-

gular fortification. On the parapet of the north-east corner is the station. This spot is known by the name of *Elworthy Barrows*.

*Haddon Beacon*, Somersetshire. The station is in the middle of a small inclosure. On the top of this beacon, which is about four miles north from Dulverton.

*North Molton Ridge*, Devonshire. This is on Exmoor Forest, and situated east from the town of North Molton, two miles and a half. A road passes over the Down upon this ridge, on which is a large barrow in the middle of a bog; on this barrow is the station.

*Span Head, or Five Barrow Down*, is nearly six miles north from South Molton. A road passes over the Down to the south of the station, and is about five hundred yards from it.

*Parracombe Station* is two miles south of Parracombe, and on Exmoor. There are several barrows on the Down, and on the third barrow from Parracombe is the station.

*Hathersage Moor*. This station is in Derbyshire. It is a very commanding situation, lying midway between the town called Hathersage and Sheffield. The station is on the highest part of the Moor, the ground falling gradually around it. Near the station, a turnpike road branches off towards Stoney Middleton, leaving the station in the angle formed by that road, and the one leading from Sheffield over the hill to the town or village of Hathersage.

*Orpit Heights*, Derbyshire. The high ground, called Orpit Heights, is about two miles from Wirksworth in the direction of Derby. The station is nearly two hundred yards from the old road leading to Derby, and close to the east side of a stone pit on the top of the highest ground. There is a stone of singular form and great size, standing upright very near to this station.

*Axedge*. The hill bearing this name is two miles south-west from Buxton. On the top of this well known hill is a barrow, the centre of which marks the station.

*Weaver Hill*, Staffordshire. This hill is north from Wooten, and close to it. The station is on a barrow on the top. The centre of the barrow marks the station.

*Castle Ring*. In the Earl of Uxbridge's park in Cannock Forest, Staffordshire, is a high spot of ground, on which are the remains of an ancient fortification. The interior of the work is planted with trees, and the point marking the station is on the western embankment.

*Bar Beacon*, Staffordshire. This is a well known spot near Walsall, having a circular plantation on its top. The point marking the station cannot be easily found for want of proper marks to which it can be referred. From the northern edge of the plantation, it is about thirty yards distant.

*Malvern Hills*. The station is on the highest point of the range, and just above the town of Great Malvern. It can be easily found.

*Cleeve Hill*, Gloucestershire. The station is nine feet north from the wall, which runs

nearly in a direction east and west across the hill. The distance is taken perpendicularly to the wall, and is the nearest point from the wall to the station. Cleeve Hill is a part of the high ground eastward of and near to Cheltenham.

*Beacon Moor* near Chumleigh in Devonshire. This station is a mile and a half from the town towards the north. It cannot be easily found; it is however on the highest part of the Down.

*Hatberleigh Station* in Devonshire, is about twenty yards to the westward of the road leading to Chumleigh, and about one mile from the town. It is near the hedge, and a little south from the cottage.

*Bradbury Castle* on Bradbury Down, Devonshire. The station is on the outside of the parapet, and close to the ditch at the north-west corner of the work.

*Warbstow Beacon* in Cornwall, is situated about half a mile north-west of Warbstow. The station is in the middle of the field said to have been the site of an old beacon.

*May Hill*, Gloucestershire. This is a well known spot near the village of Huntley. The station is on the south-east side of a circular plantation growing on this hill.

*Trelleg Beacon*, Monmouthshire. Trelleg Beacon is situated on Trelleg Moor near the town of Trelleg. The station is on the place where a beacon formerly stood, and may be easily found.

*Cradle Mountain*, Brecknockshire. The high land south from Talgarth, and some few miles from it, bears the name of Black Forest. Cradle Mountain is in the middle of this forest. The station is marked by the centre of an obtruncated cone on the highest part of the mountain.

*Mynydd Mane*, Monmouthshire. This station is on the high land south-west from Pontypool, and about three miles from it. The hill lies between two canals joining at Newport. A road passes over the hill. The station is seventy yards south from the road, and near to the eastern side of the hill.

*The Garth*. The hill thus called is close to, and a little to the north of Pentyrch in Glamorganshire. Two very large barrows stand on this hill, and the station is on the top of the western barrow.

*Ogmoor Down*, Glamorganshire. This Down lies between the villages of Ogmoor and St. Bride's. A part of this common is inclosed, and in the south-west corner of a field belonging to the rectory of St. Bride's is the station.

*Margam Down* near Margam in Glamorganshire. The station is north from the town about two miles. It is situated on the apex of a small round hill near a pond on this Down.

*Llangeinor*. The station taking this name is situated on a mountain thirteen or fourteen miles from Bridgend, towards the north, and six or seven miles from the village of Llangeinor. The land in this quarter is high, and, being entirely devoid of any defined

object, does not admit of the means by which the station can be accurately pointed out. A mountain called Blaengarrw is west from the station nearly a mile and a half.

*Cefn Bryn*, Glamorganshire. Twelve miles west from Swansea is Llanridian, a small village. South from Llanridian, and near to it, is a range of high ground having a direction east and west. At the eastern extremity of the range is a pile of stones, and near to this is the station, round which are placed many other stones for the purpose of preserving it. A remarkable stone, called King Arthur's stone, is placed on this range nearly a mile westward.

*Lannon*, Caermarthenshire. The station near this village is on the top of an insulated hill on the south-west side of Lannon. A ring of stones surrounds the station.

*Marros Beacon*, Caermarthenshire. The beacon is south from Marros church a half a mile, and near the coast.

*Newton Down*, Pembrokeshire. This Down is nearly two miles and a half south-east from Pembroke. The station cannot be pointed out with sufficient accuracy, the Down being flat, open, and destitute of marks of reference.

*Highbgate Mountain*. The land thus called is south from Pembroke, and the station is about two miles from that town in a south-west direction. There are not any marks near this station to which it can be referred.

*St. Ann's Hill*, Pembrokeshire. The station on this head land, is about one mile from the village of Dale, being in a field, a little more than half a mile from St. Ann's Lighthouses. The field may be easily found, as the farm house and the highest of the lighthouses are nearly in the same line from the station. From the south-west corner of this field, the station is distant three hundred and ten feet, and from the south-east corner three hundred and seventy-five feet.

*Plumstone Down*. This station lies nearly seven miles north-west from Haverfordwest, and a mile eastward from Roch Castle. The place of the station cannot be pointed out otherwise than by saying, that it is on that part of the Down which affords the most extensive views.

*Precelly Top*. This is a high and very well known mountain, north from Haverfordwest fourteen miles. The mountain is conical, and has a barrow on the top of it. On the south side of the flat head of the barrow is the station.

*Capel Kynon* is in Cardiganshire. The station is on an extensive moor seven miles east from Newcastle in Caermarthenshire. There are not any marks on this Down by which the station may be discovered.

*New Inn*, a village in Caermarthenshire. The station taking its name from this place is about two miles from it in a southern direction: there are two large barrows on the hill. The station is on the western barrow.

*Talsarn*, Cardiganshire. The hill on which this station is to be found is about three miles north of the village of Talsarn. A barrow of great magnitude stands on the hill: the station is upon it, and near the centre of the barrow.

*Caermarthen Vau.* The staff was erected on the highest part of this hill. Caermarthen Vau is a very high mountain, sometimes called Trecastle Beacon.

*Capellante*, a mountain in Brecknockshire. The station is on the highest part of the mountain, which has a conical top.

*Tregarron Down* is four miles from the town of Tregarron in Cardiganshire, in a direction nearly south-east: on the top of the Down is a large heap of stones. The station is sixty yards south from it.

*Aberystwith*, Cardiganshire. At the distance of a mile and a half from Aberystwith, in an eastern direction, is a small conical hill. The station is on the highest part of this hill.

*Plynlimmon*, Montgomeryshire. The station is on the highest part of this mountain. Near to it are two large piles of stones. The station is on the north east side of the highest pile, and about twenty feet from it.

*Peggwons Fwr*, or Llandinam Mountain, Montgomeryshire. This station is due east from Llanidloes, and about six miles from it. A barrow stands on the hill, the centre of which marks the station.

*Stow*, Shropshire. Close to the north side of this village is high rocky ground, having steep rocks on the slope of it. About fifty yards behind these rocks, on the highest part of the hill, the station is to be found.

*New Radnor*, Radnorshire. The station is in the forest, and on the western side of it. It is about three miles and a half from Radnor.

*Clay Hill*, commonly called Brown Clay Hill, Shropshire. This hill is nearly a mile south from the village called Prior's Ditton. There is an ancient work of stone on this hill, inclosing a considerable space of ground: on the south-west corner is the station.

*The Wrekin*, Shropshire. The station is on the eastern and highest part of this mountain.

*Long Mountain*, Montgomeryshire. This mountain is near Welch Pool, and has on its top a large ancient fortification. The ground within the work rises gradually from the circumference to the centre; and on the highest part of the hill is the station.

*Hawkston Obelisk*. This object, serving as a point of intersection to several stations, is situated in Sir Richard Hill's Park at Hawkston near Market Drayton.

*Asbley Heath*, Staffordshire. This heath is about three miles and a half from Market Drayton in an eastern direction. Upon it there is a spot destitute of furze or heath, called *Parson's Chapel*. It is on the highest ground, and the station may be found very easily.

*Mow Cop*, Staffordshire. This hill is situated four miles south from Congleton, and is well known throughout the county. The station is on the narrow ridge of it, and fifty yards east from a very large rock, on which are the remains of an old gazebo.

*Delamere Forest*, Cheshire. This forest is situated north from Tarporley, and the

station about five miles from that town. On the forest is a farm called *the Old Pale*, and west from the farm house, is a high piece of ground, at the bottom of which is a rabbit-warren. The hill is the highest on the forest: on the top of it is a hedge, crossing it in a direction north and south, and another hedge meets it at right angles near the top of the hill. The station, on which the zenith sector was erected, is thirty feet west from the former hedge, and forty yards from the latter.

*Cryn y Brain*. The mountain called by this name is in Denbighshire, being two miles south-east from the village of Llandegle. On the top is a large cairn of stones. The station lies south-east from this cairn about thirty yards. A great number of stones were taken from the great cairn, and heaped over the station.

*Pengarn*. This mountain lies between Towyn and Dolgelly in Merionethshire. At the nine mile stone from Towyn, this mountain bears north-west, and is not more than half a mile from it. "There is a high stone barrow on the top of the mountain. The station is on this barrow.

*Ynaliog*. This station is on an insulated conical hill, having a very narrow top, the centre of which marks the station. Ynaliog is about a mile and a half north from Aberdaron in Caernarvonshire.

*Rhiw Mountain*, Caernarvonshire. This mountain is south-west from Pwlheli, and about twelve miles distant from it. It is close to the little village Rhiw Lan, which lies in the bosom of the bay called *Hell's Mouth*. The station is thirty-four feet from the corner of the Beacon House.

*Snowdon*. The object was placed on the very highest part of this mountain.

*Moel Rbyddlad*, Anglesea. The station is situated on the highest part of this hill, which is about half a mile northward from the village of Llanrhyddlad.

*Holyhead*, Anglesea. The object observed was the naval signal staff on this mountain.

*Llanellian*, Anglesea. A mile south-east from this village lies an insulated hill, commonly called Llanellian Mountain. On the top of this hill is a ridge, sloping gradually off towards the north and south. The station is on the highest part of the ridge.

*Llwydiart*, Anglesea. The hill called by this name is situated on the open ground, and is about a mile east from the village of Pentreth. The south side of the hill is very steep. The station is near the commencement of the slope, and on the highest part of the hill.

*Great Orme's Head*, Caernarvonshire. The object observed was the naval signal staff.

*Llanellian*, Denbighshire. A mile and a half from this village southward lies a hill, called Llanellian Mountain. On this hill is a barrow having a concavity on its top. The centre of the concavity marks the station.

*West End of Base*, Denbighshire. In the eastern angle formed by the sea wall, and the end of the road leading from Abergele to the bathing place, is the station.

*East End of Base*, Flintshire. The station is near to the road leading from St. Asaph

to Rhuddlan. It is on the west side of the road, and no great distance from it, and is rather more than a quarter of a mile from Rhuddlan.

*Moelfre Issa*, Denbighshire. This is a mountain nearly three miles south from Abergele. On the top is a heap of stones, and on the western side, close to the heap, is the station.

*Gwaunysgaer Down*, Flintshire. This hill lies about five miles from the town of Rhuddlan. A village called Gwaunysgaer is at the bottom of the hill on its southern side. The station is on the top of the hill, and in the middle of the green spot commonly called the *Bowling Green*.

*Garreg Mountain*, Flintshire. This mountain, though properly speaking only a hill, is a mile west from the village of Whitford. The station lies about twenty yards south from an old circular building on the top of the hill.

*Heswell Hill*, Cheshire. This hill is about three miles west from Parkgate. The station is on the top of it, and north from a pool of water, and within a few feet of it.

*Go Hill*, Lancashire. This station is in the parish of Aughton, and about a mile from the village. It is half a mile west from Ormskirk Windmill, and on the top of the hill, in the middle of an inclosed field, is the station.

*Billinge Beacon*, Lancashire. This beacon is half a mile nearly from Billinge in a northern direction. It is situated on a high rising ground, and the station lies on the top of the hill in a direct line between the gazebo and a stone quarry, and about thirty yards from the former.

*Belle-field Hill*, Cheshire. This hill is about three miles and a half from Warrington towards the south, and a quarter of a mile westward from the road leading from Warrington to Northwick. It is an insulated hill. The station is on the top of the hill, which is of a conical form.

*Rivington Hill*, Lancashire. This hill is nearly five miles north-west from Bolton, and about a mile and a half eastward from Rivington Pike. A road passes over the hill. The station is nearly a hundred yards north from it. From the want of proper marks on this hill, the precise point marking the station, cannot be pointed out.

*Wittle Hill*, or *Wittle Pike*, Lancashire. This place is about seven miles northwards of Rochdale, and about two miles north from the road leading from that town to Haslington. A barrow stands on this hill. The station is on the top and in the centre of the barrow.

*Holme Moss*, Cheshire. This is part of the high land three miles north of Woodhead, and that range of hills which runs from Derbyshire through Cheshire into Yorkshire. Holme Moss is an open and barren spot, and does not contain any singularity of feature, by which the place of the station can be pointed out.

*Lord's Seat*, near Castleton, Derbyshire. This hill lies one mile north from the road leading from Castleton to Chapel in le Frith, and nearly at an equal distance from those

places. On the top of Lord's Seat is a very high barrow. The station is on the middle of the barrow.

*Bradfield Point, Yorkshire.* Bradfield Point is the northern extremity of a range, running from the south towards the north, and terminating at this point which is nearly a mile and a half from the village of Bradfield. A road passes over the hill close to the station.

*Staincross Heights, Yorkshire.* The station is half a mile nearly west from the village called Staincross. It is on the western part of the heights, and near to an old stone quarry.

*Ledstone Beacon, Yorkshire.* This station is in Ledstone Park. The beacon pole is west from the point marking the station nearly thirty-five yards.

*Boulsworth Hill, Lancashire.* This hill is about four miles from Colne, and nearly five miles from Burnley, in an eastern direction. A point on this hill is called Ladlaw, and this point is the station.

*Bleasdale Forest, Lancashire.* The object observed was placed on the highest ground, and near the western termination of this range.

*Pendle Hill, Lancashire.* On this hill was formerly a beacon. It is distant from Clitheroe five miles, and lies south from it. The station is on the eastern part of the hill, and upon the point where the beacon stood.

*Ingleborough, Yorkshire.* The station on this well known mountain is sixty-seven yards east from the old hut (a shepherd's hut). Round the station are placed a great number of very large stones.

*Great Whernside, Yorkshire.* This is a high mountain north-east from Kettlewell, and nearly two miles from it. On the top are a great number of huge rocks, scattered about in all directions. One of these rocks towards the south is perfectly flat, and on the centre of it is the station.

*Rumbalds, or Rumbles Moor, Yorkshire.* This place is nearly two miles south from Ilkley. The station is on the highest ground of this moor, and on a barrow.

*Hambleton Down, and Black Hambleton Stations, Yorkshire.* Hambleton Down is near to Hambleton Inn, which is about seven miles eastward from Thirsk. This station is on the top of a large barrow in the second field south from the moor, and in the second field west from the *Grey Mare Rocks*. Black Hambleton Station is just above Kettlebeck, a small village at the bottom of the Down, and is also on a barrow.

*Beryl Hill, Lancashire,* is a rising ground near the village of Warbreck, about three miles to the westward of the town of Poulton in the Fylde. The station is twenty feet west of the side of a lane leading from Warbreck, by some farm houses, to Bispham, and a little to the northward of a sand pit.

*The Calf, Yorkshire.* The station is about four miles north of Sedbergh, and cannot be discovered by measurement, as there is no defined object near it.



**Black Comb.** The southmost of the Cumberland range of mountains. The station is on the highest part of the mountain, and is rendered remarkable by a large quantity of stones placed round the lower part of the staff. It is about three miles south-east of the village of Bootle.

**Scilly Bank, Cumberland.** This station is about one mile and a quarter north-east of Whitehaven.

**Dent Hill, Cumberland,** is situated towards the western extremity of Copeland Forest, and the station being on its summit, from whence the ground falls abruptly in every direction, may be found without any difficulty.

**Higb Pike, Cumberland.** This is one of the Caldbeck Fells, and the station on it is about four miles south of that village.

**Cross Fell,** A very remarkable mountain about nine miles south of Aldstone in Cumberland. The station is on its summit, and may be discovered by means of the stones placed around the staff.

**Water Crag** is situated in that mountainous tract of country called Arkengarth Forest, in the North Riding of Yorkshire. The station is about three miles west of the village of Arkendale.

**Collier Law** is about two miles north-east of Stanhope in the county of Durham. The station is two hundred and thirty-two feet north-west from a pile of stones, which is kept up by the country people with great tenacity.

**Brandon Down, or West Brandon Mount, Durham:** The station is situated on the western end of a sharp ridge of earth, which appears to have been excavated from a quarry near it many years ago. It is the flat part of this ridge which is the summit of the hill, and is about one mile from East Brandon, close to the side of a lane leading from thence to West Brandon.

**Wordslow Hill, Durham.** This station is about one mile and a quarter north-east of the village of Houghton le Spring.

**Pontop Pike, Durham.** There is a plantation and a house near the top of this hill, and a stone fence runs from the end of the plantation in a northerly direction. The station is on the highest part of the hill, and about forty five feet from the angular point formed by the fence and plantation.

**Rufflaw, Northumberland,** is nearly two miles south of Loughorsley. There are several houses on this hill, but none of them sufficiently near the station to serve as a convenient reference.

**Alnwick Moor,** is about two miles westward of Alnwick in Northumberland, and the station may be discovered without any difficulty, as it is on the top of the hill, and only five yards from the junction of three stone dikes, measured in a direct line with the light-house on Coquet Island.

**Blackbeddon, Northumberland.** This hill is situated on the western side of the road,

leading from Belford to Berwick-upon-Tweed, and about one mile and a quarter south-west of Kyle. The station is on the eastern side of a barrow.

*Mordington Hill*, Scotland. The station on this hill is about three quarters of a mile south-west from the four mile stone on the road from Berwick-upon-Tweed to Ayton.

*Lumsdane Hill*, Scotland. On this hill is a large barrow, and the station is one hundred and ninety-six feet west from the centre of it.

*Sayrs Law*, Scotland. The station is on the highest part of this hill, which is the highest of the Lammer Muir range of hills. It is about nine miles south of Haddington.

*Wisp Hill*, Scotland. A well-known hill on the western side of the road leading from Longholm to Hawick. The station is about one mile south-west from Morpaul Inn.

*Crif-Fell*, Scotland. This remarkable hill is about three miles south of New Abbey. The station is close to the southern side of Douglas's Carn.

## SECTION SECOND.

ART. I. *Particulars relative to the Measurement of a new Base Line on Rhuddlan Marsh in the Year 1806, with the Reduction of that Base Line.*

North-west from St. Asaph, at the distance of four miles, commences an extensive and level piece of ground, which reaches from the village of Rhuddlan on the western borders of Flintshire, to that called Llandulas in Denbighshire. Though it bears the name marsh, yet it is for the most part cultivated and inclosed, having ditches and deep dikes. The soil is of a strong marly nature. A bank from Rhuddlan to Llandulas protects the level from the encroachments of the Irish Sea; the mean height of it above low water mark being about twenty-five feet.

By favour of John Lloyd Esq. a plan of the marsh was procured, drawn to a large scale, which greatly facilitated the choice of that part of it whereon the base line was to be measured. On due examination of the ground, with the assistance of this plan, the particular direction affording the longest measurable line was determined, the eastern extremity being near the road side, adjacent to Rhuddlan bridge, and the western on the bank or sea wall at the distance of nearly an half a mile north from Abergele.

The apparatus for the measurement of this base line, was brought from the place in which it had been deposited in Lincolnshire, after the use of it on Misterton Carr in the summer of 1802, to Rhuddlan Marsh in September, and on the 22d of the same month the base was traced out, and many points in the true line found, and marked with pickets, exactly in the same manner

and by the same means as were adopted in the measurements on Salisbury Plain, Sedgemoor, and Misterton Carr.

In the account of the Trigonometrical operations, published in the Philosophical Transactions, 1803, Mr. Berge is shewn to have re-determined the lengths of the standard and working chains. These chains, from that to the present recorded period, had been carefully preserved and cleaned at proper intervals. They were now compared with each other. At the first trial, the thermometers stood as follows: the chain B being laid straight in the coffer.

*Thermometers.*

1	2	3	4	5
55.5	55.5	55.5	55.25	56.

The temperature remaining unaltered, the chain B was taken out of the coffers, and the chain A stretched out in its stead. The difference between their lengths was measured with the micrometer screw, which gave the chain A longer than the chain B one revolution six divisions of the micrometer's head.

This operation was repeated twice in the same day, at times when the sun did not shine out, or the wind blow. The same result was given at each trial, as in the one abovementioned, differing from Mr. BERGE's determination, by measuring the length of each chain, 0,0068 parts of an inch.

The fifty feet chain was, on this occasion, compared with the standard B, and discovered to be 12,25, or 0,0471 parts of an inch shorter than that standard.

The line of the base being previously traced out, and blocks of wood sunk at the extremities, to mark the points of departure and termination, the measurement of the base was proceeded with, and continued with little interruption till the 24th day of

October, when it finished with the 249th chain, of which number eight were with the fifty feet chain.

On the first convenient opportunity, after the measurement was completed, the chains A and B were compared with each other, the temperature during the operation continuing uniform, the thermometers in the coffers standing as follows ; *viz.*

*Thermometers.*

1	2	3	4	5
59	60,8	60,8	61	61,6.

From this and several subsequent removals of each chain, it appeared that A exceeded B one revolution 7,5 divisions of the micrometer head, giving a wear of one division and a half, or 0,0058 parts of an inch in the working chain A, by the use of it on this occasion. The fifty feet chain was also compared with the standard, and found to be 12,25, or 00,471 parts of an inch shorter when measured with twice its length.

ART. II. *Reduction of the Base to the Temperature of 62°.*

The apparent length of the base was 241 chains of 100 feet + 8 chains of 50 feet each, and the overplus of the last chain, *viz.* 12,208 feet - - - - - 24512.208 Feet.

The length of the chain A, previous to the measurement, may be taken according to Mr. Berge's determination = 100 feet + 0.1325 parts of an inch, in the temperature of 54°; and if half its wear, *viz.* 0.0029 parts of an inch be added to its excess, we shall have  $\frac{0.1354}{12} \times 241 = 2,723$  feet, which add - - - - - + 2.723

The standard chain B, according to Mr. Berge's determination, is 0.0778 parts of an inch too long; and by our comparisons, it exceeds twice the length of the fifty feet chain by 0.0471 parts of an inch. Therefore twice the length of the fifty chain is 0.0307 parts of an inch too great, which gives  $\frac{0.0307}{12} \times 4 = 0,01$ , which also add - - - - - + 0.01

The sum of the degrees shewn on the thermometers was 76945, wherefore  $\frac{76945}{5} - 54^\circ \times 24512 \times \frac{0.0075}{12} = 1,345$  feet, which is the correction for the mean heat in which the base was measured above 54°, the temperature in which the chains were laid off, and this add - - - - - + 1.345

Finally, we have  $\frac{0.01237 \times 245.12 \times 8}{12} = 2,022$  feet for the reduction of the base to the temperature of 62°, which subtract - - - - - - 2.022

Hence the true length of the base in the temperature of 62° is - - - - - 24514.26

**ART. III. Calculation of the Sides of the principal Triangles carried on from the Side joining the Stations Bowbrickhill and Lilleyhoe towards Cambridgeshire and Norfolk. Plate I.**

Distance from Bowbrickhill to Lilleyhoe, 69867,5 feet. Phil. Trans. 1803.

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation	Distances. Feet.
	Royston -	18 55 45,5	+ 0,51	18 55 46	
	Lilleyhoe	139 18 13,5	- 1,21	139 18 13	
	Bowbrickhill	21 46 1	- 0,13	21 46 1	
		180 0 0	"		
Royston from { Lilleyhoe -					79866,8*
Bowbrickhill					140433,6

Distance from Lilleyhoe to Lidlington 49025 feet. Phil. Trans. 1803.

11.	Royston - - -	23 43 41,75		23 43 42	
	Lilleyhoe - - -	115 18 36 .	.	115 18 36	
	Lidlington - - -	. . . .	.	40 57 42	
Royston from { Lilleyhoe -					79867*
Lidlington -					110136,5
111	Royston - - -	126 8 16,75		126 8 16	
	Orwell - - -	35 24 20		35 24 20	
	Lilleyhoe - - -	. . .		18 27 24	
Orwell from { Lilleyhoe -					111330,9
Royston -					43642,8
1V	Royston - - -	50 58 3,5		50 58 3	
	Orwell - - -	101 51 21,5		101 51 21	
	Balsham - - -	27 10 36		27 10 36	
Balsham from { Orwell - - -					74225
Royston - - -					93515,3

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
v.	Trusler Hill - Brogborough - Lilleyhoe -	$\begin{array}{r} 121^{\circ} 38' 32'' \\ 46 \quad 15 \quad 28 \\ 12 \quad 6 \quad 0 \\ \hline 180 \quad 0 \quad 0 \end{array}$	"	$\begin{array}{r} 121^{\circ} 38' 32'' \\ 46 \quad 15 \quad 28 \\ 12 \quad 6 \quad 0 \end{array}$	
		Brogborough from { Trusler Hill Lilleyhoe -			14702.7 59713.5
vi.	Orwell - Maddingly - Balsham -	$\begin{array}{r} 54 \quad 0 \quad 44.5 \\ 102 \quad 57 \quad 27.75 \\ 23 \quad 1 \quad 49.25 \\ \hline 180 \quad 0 \quad 1.5 \end{array}$		$\begin{array}{r} 54 \quad 0 \quad 44 \\ 102 \quad 57 \quad 27 \\ 23 \quad 1 \quad 49 \end{array}$	
		Maddingly from { Balsham - Orwell -			61627.8 29796.8
vii.	Orwell - Balsham - Newmarket -	$\begin{array}{r} 19 \quad 7 \quad 3 \\ 130 \quad 25 \quad 24 \\ \hline \end{array}$		$\begin{array}{r} 19 \quad 7 \quad 3 \\ 130 \quad 25 \quad 24 \\ 30 \quad 27 \quad 33 \end{array}$	
		Newmarket from { Balsham - Orwell -			47954.2 111467.4
ix.	Maddingly - Balsham - Northy -	$\begin{array}{r} 96 \quad 47 \quad 58.25 \\ 40 \quad 24 \quad 23.75 \\ \hline \end{array}$		$\begin{array}{r} 96 \quad 47 \quad 58 \\ 40 \quad 24 \quad 24 \\ 42 \quad 47 \quad 38 \end{array}$	
		Northy from { Balsham - Maddingly -			90076.1 58801.6
ix.	Balsham - Newmarket - Ely Minster -	$\begin{array}{r} 45 \quad 31 \quad 21 \\ 104 \quad 53 \quad 23 \\ \hline \end{array}$		$\begin{array}{r} 45 \quad 31 \quad 21 \\ 104 \quad 53 \quad 23 \\ 29 \quad 35 \quad 16 \end{array}$	
		Ely Minster from { Newmarket - Balsham -			69298.5 93860.1



No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Fect.
x.	Newmarket - Brandon Hill - Ely Minster -	$\begin{array}{r} 71^{\circ} 6' 46,25 \\ 51 50 57,25 \\ . . . \end{array}$	"	$\begin{array}{r} 71^{\circ} 6' 46 \\ 51 50 57 \\ 57 2 17 \end{array}$	
	Brandon Hill from { Ely Minster Newmarket -				83377,9 73937,7
x i.	Newmarket - Brandon Hill - Littleport -	$\begin{array}{r} 58 55 4,25 \\ 66 5 15,75 \\ . . . \end{array}$		$\begin{array}{r} 58 55 4 \\ 66 5 15 \\ 54 59 42 \end{array}$	
	Littleport from { Brandon Newmarket -				77307,5 82519,6
x i i.	Trusler Hill - Bowbrickhill - Brogborough -	$\begin{array}{r} 79 8 40,5 \\ 39 44 20 \\ 61 7 0 \\ 180 0 0,5 \end{array}$		$\begin{array}{r} 79 8 40 \\ 39 44 20 \\ 61 7 0 \end{array}$	
	Brogborough from Bowbrickhill -				22587,2"
x i i i.	Bowbrickhill - Lilleyhoe - Brogborough -	$\begin{array}{r} 54 38 58 \\ 17 58 10 \\ . . . \end{array}$		$\begin{array}{r} 54 38 58 \\ 17 58 10 \\ 107 22 52 \end{array}$	
	Brogborough from { Bowbrickhill Lilleyhoe -				22586,2* 59712,5
x i v.	Bowbrickhill - Hill Farm - Horsemoor Hill -	$\begin{array}{r} 39 51 19 \\ 27 50 22 \\ . . . \end{array}$		$\begin{array}{r} 39 51 19 \\ 27 50 22 \\ 112 18 19 \end{array}$	
	Horsemoor Hill from { Bowbrickhill Hill Farm				8166,1 11206,2

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
xv.	Bowbrickhill - Trusler Hill - - Horsemoor Hill -	$\begin{array}{ccc} 5 & 52 & 54 \\ 3 & 59 & 0 \\ 170 & 8 & 6 \end{array}$	"	$\begin{array}{ccc} 5 & 52 & 54 \\ 3 & 59 & 0 \\ 170 & 8 & 6 \end{array}$	
				Horsemoor Hill from { Bowbrickhill Trusler Hill	8165,6 12044,8
xvi.	Brogborough - - Bowbrickhill - - - Horsemoor Hill -	$\begin{array}{ccc} 19 & 4 & 25 \\ 45 & 37 & 41 \\ . & . & . \end{array}$	.	$\begin{array}{ccc} 16 & 4 & 25 \\ 43 & 37 & 41 \\ 115 & 17 & 54 \end{array}$	
				Horsemoor Hill from { Brogborough Bowbrickhill	17859 8164,4
xvii.	Brogborough - Bowbrickhill - - Hill Farm - - -	$\begin{array}{ccc} 85 & 29 & 1 \\ 37 & 6 & 50 \\ . & . & . \end{array}$	..	$\begin{array}{ccc} 85 & 29 & 1 \\ 37 & 6 & 50 \\ 57 & 24 & 9 \end{array}$	
				Hill Farm from { Brogborough - Bowbrickhill -	16178 26728,9

ART. IV. *Calculation of the Sides of the principal Triangles carried on from the Side Arbury Hill and Bardon Hill towards the Northern Part of Leicestershire.*

Distance from Arbury Hill to Bardon Hill 180434 feet.

xviii.	Arbury Hill - Bardon Hill - - Helkinton - - -	$\begin{array}{ccc} 36 & 45 & 31,75 \\ 17 & 44 & 20,5 \\ 125 & 30 & 8 \end{array}$	.	$\begin{array}{ccc} 36 & 45 & 32 \\ 17 & 44 & 21 \\ 125 & 30 & 7 \end{array}$	.
		180 0 0,25			
				Helkinton from { Arbury Hill - Bardon Hill -	67529,4 132638,3
				N	

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
xi.	Arbury Hill	27 3 31,25		27 3 31	Feet.
	Burrow Hill	143 13 51,25		143 13 51	
	Helkinton			9 42 38	

Burrow Hill from { Helkinton - 51319,1  
Arbury Hill 19028,4

Distance from Holland Hill to Bardon Hill 124460 feet.

xx.	Holland Hill	68 46 52,5	68 46 52
	Bardon Hill -	39 39 16,5	39 39 17
	Stathern Point	71 33 50,75	71 33 51

179 59 59,75

Stathern Point from { Bardon Hill 122298,7  
Holland Hill 83722,1

From the last triangles we get the distance from Bardon Hill to Helkinton = 132638,3 feet, and the distance from Bardon Hill to the station on Stathern Point = 122298,7 feet; these, with the observed angle at Bardon Hill, viz.  $93^{\circ} 15' 28''$ , give the angles in the following triangle.

xxi.	Stathern Point -	45 33 55	which triangle gives 185455,2 feet for the distance between Helkinton Station and Stathern Point Station.
	Helkinton -	41 40 37	
	Bardon Hill -	93 15 28	

xxii.	Helkinton - -	9 0 10	9 0 10
	Stathern Point - -	11 10 53	11 10 53
	Tilton on the Hill - -	159 48 57	159 48 57
		180 0 0	

Tilton on the Hill from { Stathern Point 84108  
Helkinton - 104228,2

xxiii.	Helkinton - -	50 10 46,5	-0,7	50 10 46	
	Bardon Hill -	50 32 31,25	-0,48	50 32 31	
	Tilton on the Hill -	79 16 43,5	-1,58	79 16 43	
		180 0 1,25			

Tilton on the Hill { Helkinton - 104228,1  
Bardon Hill 103683,2

No. of Triangles	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation	Distances.
xxiv.	Bardon Hill - Tilton on the Hill - Stathern Point -	$\begin{array}{r} 0 \quad 42 \quad 50,75 \\ 80 \quad 32 \quad 18,5 \\ 56 \quad 44 \quad 45,25 \\ \hline 180 \quad 0 \quad 0,5 \end{array}$	$\begin{array}{r} -0,32 \\ -0,6 \\ -0,95 \end{array}$	$\begin{array}{r} 0 \quad 42 \quad 50,5 \\ 80 \quad 32 \quad 18,5 \\ 56 \quad 44 \quad 45 \end{array}$	<p>Feet.</p> <p>Tilton on the Hill from Stathern Point 841076</p>
xxv.	Bardon Hill - Holland Hill - Cropwell Bishop -	$\begin{array}{r} 23 \quad 23 \quad 48,5 \\ 48 \quad 13 \quad 36,5 \\ 108 \quad 22 \quad 36,5 \\ \hline 180 \quad 0 \quad 1,5 \end{array}$	$\begin{array}{r} -0,2 \\ -0,11 \\ -1,1 \end{array}$	$\begin{array}{r} 23 \quad 23 \quad 48 \\ 48 \quad 13 \quad 36 \\ 108 \quad 22 \quad 36 \end{array}$	<p>Cropwell Bishop { Holland Hill - 52078,1 Bardon Hill - 97808,3</p>
xxvi.	Bardon Hill - Stathern Point - Cropwell Bishop -	$\begin{array}{r} 16 \quad 15 \quad 34,25 \\ 43 \quad 57 \quad 24,5 \\ 119 \quad 47 \quad 2,25 \\ \hline 180 \quad 0 \quad 1 \end{array}$	$\begin{array}{r} \\ \\ \end{array}$	$\begin{array}{r} 16 \quad 15 \quad 34 \\ 43 \quad 57 \quad 24 \\ 119 \quad 47 \quad 2 \end{array}$	<p>Cropwell Bishop from { Stathern Point 39454 Bardon Hill - 97810,2</p>
xxvii.	Cropwell Bishop - Holland Hill - Stathern Point -	$\begin{array}{r} 131 \quad 50 \quad 19 \\ 20 \quad 33 \quad 12 \\ 27 \quad 36 \quad 30 \\ \hline 180 \quad 0 \quad 1 \end{array}$	$\begin{array}{r} \\ \\ \end{array}$	$\begin{array}{r} 131 \quad 50 \quad 18 \\ 20 \quad 33 \quad 12 \\ 27 \quad 36 \quad 30 \end{array}$	<p>Cropwell Bishop from { Stathern Point 39452,5 Holland Hill - 52076,2</p>
xxviii.	Holland Hill - Cropwell Bishop - Bottesford -	$\begin{array}{r} 40 \quad 17 \quad 28,75 \\ 97 \quad 22 \quad 7 \\ \hline \end{array}$	$\begin{array}{r} \\ \\ \end{array}$	$\begin{array}{r} 40 \quad 17 \quad 29 \\ 97 \quad 22 \quad 7 \\ 42 \quad 20 \quad 24 \end{array}$	<p>Bottesford from { Holland Hill - 76681,4 Cropwell Bishop 50001</p>

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No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Fect.
xxix.	Stathern Point - Cropwell Bishop - Bottesford -	$\begin{array}{r} 93^{\circ} 34' 9'' \\ 34^{\circ} 28' 15'' \\ \hline \end{array}$	"	$\begin{array}{r} 93^{\circ} 34' 9'' \\ 34^{\circ} 28' 15'' \\ 51^{\circ} 57' 36'' \end{array}$	
	Bottesford from { Stathern Point Cropwell Bishop				28352,8 49997,8
xxx.	Cropwell Bishop - Holland Hill - South End of a proposed Base Line -	$\begin{array}{r} 125^{\circ} 27' 11,25'' \\ 18^{\circ} 42' 50,75'' \\ \hline 35^{\circ} 50' 0,25'' \\ \hline 180^{\circ} 0' 2,25'' \end{array}$	"	$\begin{array}{r} 125^{\circ} 27' 10'' \\ 18^{\circ} 42' 50'' \\ \hline 35^{\circ} 50' 0'' \end{array}$	
	South End of Base from { Holland Hill - Cropwell Bishop -				72463,5 28541
xxxi.	Cropwell Bishop - North End of Base - South End of Base -	$\begin{array}{r} 39^{\circ} 52' 48,5'' \\ 38^{\circ} 51' 45'' \\ \hline 101^{\circ} 15' 27'' \\ \hline 180^{\circ} 0' 1,5'' \end{array}$		$\begin{array}{r} 39^{\circ} 52' 49'' \\ 38^{\circ} 51' 45'' \\ \hline 101^{\circ} 15' 26'' \end{array}$	
	North End of Base from { South End - Cropwell Bishop				29165,7 44612
xxxii.	Cropwell Bishop - Stathern Point - North End of Base	$\begin{array}{r} 46^{\circ} 15' 59,5'' \\ 75^{\circ} 2' 5,5'' \\ \hline 58^{\circ} 41' 57,25'' \\ \hline 180^{\circ} 0' 2,75'' \end{array}$		$\begin{array}{r} 46^{\circ} 15' 59'' \\ 75^{\circ} 2' 4'' \\ \hline 58^{\circ} 41' 57'' \end{array}$	
	North End of Base from { Stathern Point - Cropwell Bishop				33363,6 44607,8
xxxiii.	Stathern Point - South End of Base - North End of Base	$\begin{array}{r} 59^{\circ} 3' 56,75'' \\ 101^{\circ} 5' 54'' \\ \hline 19^{\circ} 50' 9,5'' \\ \hline 180^{\circ} 0' 0,25'' \end{array}$		$\begin{array}{r} 59^{\circ} 3' 57'' \\ 101^{\circ} 5' 53'' \\ \hline 19^{\circ} 50' 10'' \end{array}$	
	South End of Base from { North End of Base Stathern Point -				29162,3 11537

The last four of the foregoing triangles might have been omitted, were it not that many observations to church towers and other objects were made from the two extremities of the base once proposed to be measured.

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
xxxiv.	Helkinton - -	45 9 48	"	45 9 48	
	Tilton on the Hill - -	9 2 8,25		9 2 8	
	Naseby-field - -	125 48 4,5		125 48 4	
		180 0 0,75			
	Naseby-field from { Helkinton - - Tilton on the Hill - -				20182 91128,6
xxxv.	Holland Hill - -	73 30 59		73 30 59	
	Stathern Point - -	73 17 38		73 17 38	
	Lincoln Minster - -	. . .		33 11 33	
	Lincoln Minster from { Holland Hill - - Stathern Point				146484,5 146656,3
xxxvi.	Holland Hill - -	98 5 59,5		98 5 59	
	Sutton Ashfield - -	67 51 16		67 51 16	
	Lincoln Minster - -	. . .		14 2 45	
	Lincoln Minster from { Holland Hill Sutton Ashfield				146454,7 156541,8

Mean distance from Lincoln Minster to Holland Hill 146469,6 feet.

Distance between Castle Ring and Orpit Heights 153235,2 feet.

xxxvii.	Orpfit Heights	42 2 15	-0,02	42 2 15
	Castle Ring	25 21 43,5	-0,23	25 21 43
	Weaver Hill	112 36 3,5	-1,44	112 36 2
		180 0 2		
	Weaver Hill from { Orpfit Heights			71095,7
		Castle Ring		111144,1

**ART. V. Calculation of the Sides of the principal Triangles proceeding from the Base Line recently measured on Rhuddlan Marsh.**

Length of the Base on Rhuddlan Marsh 24514,3 feet.

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation	Distances.
					Feet.
xxxviii.	East End of Base -	135 11 59.5	"	135 11 58	
	West End of Base -	20 34 2.5		20 34 1	
	Gwaunysgaer Down	24 14 1.5		24 14 1	
		180 0 3.5			
	Gwaunysgaer Down from { East End of Base West End of Base				
xxxix.	East End of Base -	40 12 33		40 12 32	
	West End of Base -	75 45 17		75 45 17	
	Moelfre Issa -	64 2 11		64 2 11	
		180 0 1.			
	Moelfre Issa from { East End of Base West End of Base				
xl.	West End of Base -	96 19 19.5		96.19 18	
	Gwaunysgaer Down -	21 40 25		21 40 24	
	Moelfre Issa -	62 0 19.5		62 0 18	
		180 0 4			
	Moelfre Issa from the West End of the Base				

The mean distance between Moelfre Issa and the West End of the Base, viz. 17602,2 feet used in the above triangle, gives the distance between Moelfre Issa and Gwaunysgaer Down Stations = 47372 feet.

xli.	Gwaunysgaer Down -	37 42 34,75	+0,03	37 42 34,75	
	Moelfre Issa -	117 26 11,25	-06,7	117 26 10,5	
	Great Orme's Head -	. . .		24 51 14,75	
	Great Orme's Head from { Gwaunysgaer Down Moelfre Issa -				100030,7 68938,8

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
XLII.	Moelfre Issa - Llanelian Mountain - Great Orme's Head -	$\begin{array}{r} 21\ 49\ 26 \\ 138\ 45\ 47 \\ \hline \end{array}$	$\begin{array}{r} +0,12 \\ -0,86 \\ \hline \end{array}$	$\begin{array}{r} 21\ 49\ 26 \\ 138\ 45\ 46 \\ 19\ 24\ 48 \\ \hline \end{array}$	
	Llanelian Mountain from { Moelfre Issa - Great Orme's Head				$\begin{array}{r} 34761,3 \\ 38879,2 \end{array}$
XLIII.	Llanelian Mountain - Garreg Mountain - Great Orme's Head	$\begin{array}{r} 124\ 52\ 10,5 \\ 15\ 12\ 25 \\ \hline \end{array}$	$\begin{array}{r} -0,10 \\ +1,42 \\ \hline \end{array}$	$\begin{array}{r} 124\ 52\ 10,5 \\ 15\ 12\ 26,5 \\ 39\ 55\ 23 \\ \hline \end{array}$	
	Garreg Mountain from { Llanelian Mountain - Great Orme's Head				$\begin{array}{r} 95119,4 \\ 121605,2 \end{array}$
XLIV	Llanelian Mountain - Garreg Mountain - Arrennig Mountain	$\begin{array}{r} 100\ 7\ 44,5 \\ 46\ 10\ 32,5 \\ \hline \end{array}$	$\begin{array}{r} -1,65 \\ -0,50 \\ \hline \end{array}$	$\begin{array}{r} 100\ 7\ 42,75 \\ 46\ 10\ 32 \\ 33\ 41\ 45,25 \\ \hline \end{array}$	
	Arrennig Mountain from { Llanelian Mountain - Garreg Mountain				$\begin{array}{r} 123697,2 \\ 168780,8 \end{array}$
XLV.	Garreg Mountain - Cyrn y Brain - Arrennig Mountain	$\begin{array}{r} 52\ 12\ 59 \\ 92\ 33\ 31,5 \\ \hline \end{array}$	$\begin{array}{r} -0,48 \\ -1,59 \\ \hline \end{array}$	$\begin{array}{r} 52\ 12\ 58,5 \\ 92\ 33\ 30 \\ 35\ 13\ 31,5 \\ \hline \end{array}$	
	Cyrn y Brain Mountain from { Garreg Mountain - Arrennig Mountain				$\begin{array}{r} 97449^* \\ 133525,4 \end{array}$
XLVI.	Garreg Mountain - Llanelian Mountain - Cyrn y Brain Mountain	$\begin{array}{r} 98\ 23\ 31,5 \\ 41\ 24\ 11,25 \\ 40\ 12\ 19,25 \\ \hline 180\ 0\ 2 \end{array}$	$\begin{array}{r} -1,02 \\ -0,51 \\ -0,64 \\ \hline \end{array}$	$\begin{array}{r} 98\ 23\ 30,5 \\ 41\ 24\ 10,75 \\ 40\ 12\ 18,75 \\ \hline \end{array}$	
	Cyrn y Brain Mountain from { Garreg Mountain - Llanelian Mountain				$\begin{array}{r} 97451,1^* \\ 145773,8 \end{array}$

Mean distance between the Stations on Cyrn y Brain and Garreg Mountains 97450 feet



No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Fect.
XLVII.	Garreg Mountain -	62 29 13,75	-1,16	62 29 12,75	
	Cyrn y Brain Mountain	74 23 15,5	-1,64	74 23 14,5	
	Delamere Forest -	43 7 33	-0,83	43 7 32,75	
		180 0 2,25			
	Delamere Forest from { Garreg Mountain - Cyrn y Brain Mountain				137294 126431,6
XLVIII.	Cyrn y Brain Mountain	45 50 51,5	-1,16	45 50 50,5	
	Delamere Forest -	89 38 38,5	-1,91	89 38 37	
	Ashley Heath -	44 30 32,75	-1,02	44 30 32,5	
		180 0 2,75			
	Ashley Heath from { Cyrn y Brain Mountain Delamere Forest -				180350* 129401,1
XLIX.	Delamere Forest -	38 8 17,5	-0,56	38 8 17	
	Ashley Heath -	58 17 24,5	-0,60	58 17 24	
	Mow Copt -	.	.	83 34 19	
	Mow Copt from { Delamere Forest Ashley Heath -				110780,5 80418,3
L.	Ashley Heath -	45 40 38	-0,39	45 40 37,5	
	Weaver Hill -	42 11 18,75	-0,40	42 11 18,5	
	Mow Copt -	.	.	92 8 4	
	Weaver Hill from { Ashley Heath Mow Copt -				119663,4 85668,3
LI.	Weaver Hill -	64 23 4,75	-0,96	64 23 3,75	
	Castle Ring -	61 9 42,75	-0,96	61 9 42	
	Ashley Heath -	.	.	54 27 14,25	
	Castle Ring from { Weaver Hill - Ashley Hill -				111148,1* 123178,4*

In the Account of the Trigonometrical Operations, published in the Philosophical Transactions in the year 1803, page 433, Part II. It will be seen that the distance between Castle Ring and the station on Orpit Heights, was found to be 153235,2 feet, which distance entirely depended on the base of verification on Misterton Carr.—This side 153235,2 feet in the 37th Triangle of the present work, viz. Orpit Heights, Castle Ring, and Weaver Hill gives 111144,1 feet for the distance between Castle Ring and Weaver Hill. But by the above triangle, Weaver Hill, Castle Ring, and Ashley Heath, that distance is found to be 111148,4 feet, and depending altogether on the base line recently measured on Rhuddlan Marsh. The difference between the independent results in a line exceeding twenty-one miles in length is 4,3 feet; therefore, if the computation had been carried on directly from one base to the other, as for instance, from Misterton Carr to Rhuddlan Marsh, the measured and computed lengths of the latter base, would not have differed more than nine inches and an half.

Cyrn y Brain Mountain from Arrennig Mountain 133525,4 feet.

No. of Triangles	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.  Feet.
LII	Cyrn y Brain Mountain	78° 27' 46,5		78° 27' 44,75	
	Long Mountain -	47° 56' 2,5		47° 56' 1,25	
	Arrennig Mountain -			53° 36' 14	

Long Mountain from { Cyrn y Brain Mountain 144778,5  
Arrennig Mountain - 176229,4

LIII	Cyrn y Brain Mountain	38° 16' 4	-0,97	38° 16' 3
	Long Mountain -	93° 3' 53,25	-2,15	3° 51
	The Wrekin -			40° 6

The Wrekin from { Cyrn y Brain Mountain 92531,1  
Long Mountain - 19411,8

LIV	Cyrn y Brain Mountain	30° 28' 30,5	-1,1	30° 28' 29,5
	Ashley Heath -	81° 36' 1,5	-1,77	81° 35' 59,75
	The Wrekin -			67° 55' 30,75

Ashley Heath from { Cyrn y Brain Mountain 80352,2°  
The Wrekin - 98702,9

No. of Triangles.	Names of Stations.	Observed Angles.	Diff	Angles corrected for Calculation.	Distances.
LV.	Ashley Heath - - Castle Ring - - The Wrekin - -	$\begin{array}{ccc} 75 & 28 & 8,25 \\ 44 & 9 & 15,5 \\ . & . & . \end{array}$	$\begin{array}{c} -1,11 \\ -0,7 \end{array}$	$\begin{array}{ccc} 75 & 28 & 7,25 \\ 44 & 9 & 14,75 \\ 60 & 22 & 38 \end{array}$	Feet.
Castle Ring from { Ashley Heath - The Wrekin -					$\begin{array}{r} 123174,7^* \\ 137161,6 \end{array}$

LVI.	Castle Ring - - Bar Beacon - - The Wrekin - -	$\begin{array}{ccc} 89 & 55 & 48,75 \\ 69 & 24 & 32 \\ . & . & . \end{array}$	$\begin{array}{c} -0,8 \\ -0,42 \end{array}$	$\begin{array}{ccc} 89 & 55 & 48 \\ 69 & 24 & 31,5 \\ 20 & 39 & 40,5 \end{array}$	
Bar Beacon from { Castle Ring - The Wrekin -					$\begin{array}{r} 51699,3^* \\ 146522,3 \end{array}$

Distance from Castle Ring to Corley — 123539,7 feet. Phil. Trans. 1803, p. 433.

LVII.	Castle Ring - - Bar Beacon - - Corley - -	$\begin{array}{ccc} 35 & 56 & 1 \\ 123 & 41 & 19 \\ . & . & . \end{array}$	$\begin{array}{c} -0,25 \\ -1,04 \end{array}$	$\begin{array}{ccc} 35 & 56 & 0,75 \\ 123 & 41 & 18 \\ 20 & 22 & 41,25 \end{array}$	
Bar Beacon from { Castle Ring - Corley -					$\begin{array}{r} 51700,5^* \\ 87131^* \end{array}$

Distance from Bardon Hill to Corley 106357,3 feet. Phil. Trans. 1803, p. 433.

LVIII.	Bardon Hill - - Corley - - Bar Beacon - -	$\begin{array}{ccc} 38 & 8 & 41,75 \\ 92 & 55 & 30 \\ 48 & 55 & 50 \end{array}$	$\begin{array}{c} -0,51 \\ -1,13 \\ -0,49 \end{array}$	$\begin{array}{ccc} 38 & 8 & 41,5 \\ 92 & 55 & 29 \\ 48 & 55 & 49,5 \end{array}$	
Bar Beacon from { Bardon Hill - Corley -					$\begin{array}{r} 140890 \\ 87134,5^* \end{array}$

From the two first of the last three triangles, we have another verification of the bases on Rhuddlan Marsh and Misterton Carr. The distance from Castle Ring to Bar Beacon, as deduced from the base on the latter spot, is 51700,5 feet and 51699,3 feet, as derived from the base line measured on the former.

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
LIX.	Cyrn y Brain Mountain Ashley Heath Pole on Long Mount Forest	55 20 35,5 65 58 36,25 .	-2,13 -2,54 .	55 20 33,25 65 58 33,75 58 40 53	Feet.  Long Mount Pole from { Cyrn y Brain Mountain 192824,7* Ashley Heath - - 173653,9 Mean distance from Cyrn y Brain Mountain to Ashley Heath 180351,1 feet.
LX.	Cyrn y Brain Mountain Ashley Heath Rodney's Pillar	62 23 4 39 59 20,25 .	-1,44 -0,98 .	62 23 2,5 39 59 19,25 77 37 38,25	Rodney's Pillar from { Cyrn y Brain Mountain 118655,9 Ashley Heath - - 163604,2*
LXI.	Delamere Forest Ashley Heath Rodney's Pillar	55 4 35,5 84 29 50,75 .	-1,5 -2,25 .	55 4 34 84 29 48,5 40 25 37,5	Rodney's Pillar from { Delamere Forest 198625,6 Ashley Heath - 163610*
Mean distance from Ashley Heath to Rodney's Pillar 163607,1 feet.					
LXII.	Ashley Heath Brown Clay Hill Rodney's Pillar	47 26 30,25 64 19 8 .	-1,41 -1,63 .	47 26 28,75 64 19 6,5 68 14 24,75	Brown Clay Hill from { Ashley Heath 168604,7* Rodney's Pillar 133719,9
LXIII.	Ashley Heath Brown Clay Hill Long Mount Pole	21 27 5,75 83 43 56 .	-1,05 -0,64 .	21 27 5 83 43 55,25 74 48 59,75	Brown Clay Hill from { Ashley Heath 168600* Long Mount Pole - 63889,2

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Mean distance from Brown Clay Hill to Ashley Heath 168602,3 feet.

No. of Triangles.	Names of Stations	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
LXIV.	Ashley Heath - Brown Clay Hill - Hawkeston Obelisk -	51 18 50 19 10 2 . . .	+0,03 -0,32 . . .	51 18 50 19 10 1,75 109 31 7,5	
	Hawkeston Obelisk from { Ashley Heath - Brown Clay Hill -				58731,6* 139632,9
LXV.	Delamere Forest - Ashley Heath - Hawkeston Obelisk -	25 48 17,5 80 37 21 . . .	-0,46 -0,7 . . .	25 48 17 80 37 20,25 73 34 22,75	
	Hawkeston Obelisk from { Delamere Forest - Ashley Heath -				133105,1* 57726,2*
LXVI.	Cyrn y Brain Mountain Delamere Forest - Hawkeston Obelisk -	60 26 45,5 63 50 21 . . .	-1,19 -1,23 . . .	60 26 44,25 63 50 19,75 55 42 56	
	Hawkeston Obelisk from { Cyrn y Brain Mountain Delamere Forest -				137342,6* 133108,8*
LXVII.	Long Mountain - Cyrn y Brain Mountain Hawkeston Obelisk -	59 58 33,5 54 8 40 . . .	-1,26 -1,2 . . .	59 58 32,25 54 8 38,75 65 52 49	
	Hawkeston Obelisk from { Long Mountain - Cyrn y Brain Mountain				128566,4 137342*
Distance from the Long Mountain to the Wrekin 119411,8 feet.					
LXVIII.	Long Mountain - Stow Hill - The Wrekin -	84 0 3,5 52 20 58 . . .	-1,29 -0,79 . . .	84 0 2,25 52 20 57,25 43 39 0,5	
	Stow Hill from { Long Mountain - The Wrekin -				104104,3 149994,2

feet.

No. of Triangles.	Names of Stations.	Observed Angles	Dist.	Angles corrected for Calculation.	Distances.
					Feet.
LXIX	Stow Hill - Brown Clay Hill - The Wrekin -	23 28 32 122 50 14.5	-0.03 -1.53	23 28 32 123 50 13 33 41 15	
	Brown Clay Hill from { Stow Hill - The Wrekin				99017.7 71114.3
LXX	Stow Hill - Brown Clay Hill - Long Mount Pole -	40 7 52 47 12 31 . . .		40 7 52 47 12 31 92 39 37	
	Long Mount Pole from Stow Hill				72740.8
LXXI.	Stow Hill - Brown Clay Hill - Malvern Station -	56 46 16 89 6 55 34 6 52 180 0 3	-1.16 -1.67 =1	56 46 15 89 6 53.5 34 6 51.5	
	Malvern Station from { Stow Hill - Brown Clay Hill				176529.8 147682.1
LXXII.	Stow Hill - Malvern Station - Cradle Mountain -	67 53 50 49 58 40.5 . . .	-1.38 -1.76	67 53 48.75 49 58 38.75 62 7 32.5	
	Cradle Mountain from { Malvern Station Stow Hill				185623.2 152928.4
Mean distance from Cynr y Brain Mountain to Garreg Mountain 97450 feet.					
LXXIII.	Cynr y Brain Mountain - Garreg Mountain - Snowdon -	69 54 7 81 7 0.25 . . .	-1.37 -1.77	69 54 5.75 81 6 58.5 28 58 55.75	
	Snowdon from { Cynr y Brain Mountain - Garreg Mountain -				198707.2 188872.5

*Trigonometrical Survey.*

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances. Feet.
LXIV.	Garreg Mountain -	36 1 24,75	-1,49	36 1 23,25	
	Llanelian Mountain	58 20 7,25	-1,56	58 20 5,75	
	Snowdon - - -			85 38 31	

Llanelian Mountain in { Garreg Mountain 221266\*  
Anglesea, from { Snowdon - 130506

Distance from Llanelian Mountain, Denbighshire, to Garreg Mountain 95119,4 feet.

LXXV.	Llanelian Mountain	148 8 2,5	-5,4	148 7 57	
	Garreg Mountain -	18 44 53,5	+2,27	18 44 55,75	
	Llanelian Mountain, Anglesea, - -	13 7 8,25	+1,45	13 7 7,25	
		180 0 4,25			
	Llanelian Mountain from {				
				Garreg Mountain -	221259*
				Llanelian Mountain, in Denbighshire -	134792,5
LXXVI.	Llanelian Mountain, Anglesea - -	103 47 38	-1,14	103 47 36,75	
	Moel Rhyddlad -	55 44 39,25	-0,15	55 44 39	
	Snowdon - - -	.		20 27 44,25	
	Moel Rhyddlad from {				
				Llanelian Mountain, Anglesea	55199,1
				Snowdon - - -	153342,7
LXXVII.	Moel Rhyddlad -	31 43 44,5	-0,07	31 43 43,5	
	Llanelian Mountain, Anglesea - -	111 13 19	-0,45	111 13 17,5	
	Llwydiart Mountain -	37 2 59,75	-0,05	37 2 59	
		180 0 3,25			
	Llwydiart Mountain from {				
				Moel Rhyddlad - - -	85402,9*
				Llanelian Mountain, Anglesea	48180,5

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
LXXVIII.	Moel Rhyddlad - - Llwydiart Mountain - - Snowdon - - -	$\begin{array}{ccc} 24 & 0 & 54.75 \\ 131 & 13 & 8 \\ . & . & . \end{array}$	$\begin{array}{c} +0.19 \\ -1.81 \end{array}$	$\begin{array}{ccc} 24 & 0 & 55 \\ 131 & 13 & 7.75 \\ 24 & 45 & 57.75 \end{array}$	Feet.   Llwydiart Mountain from { Moel Rhyddlad Snowdon - 85399.4* 82966.6
LXXIX.	Llanelian Mountain, Anglesea - - - Llaneliau Mountain, Denbighshire - Great Orme's Head -	$\begin{array}{ccc} 8 & 49 & 1.5 \\ 23 & 15 & 52 \\ . & . & . \end{array}$	$\begin{array}{c} +0.21 \\ +1.10 \end{array}$	$\begin{array}{ccc} 8 & 49 & 1.75 \\ 23 & 15 & 53 \\ 147 & 55 & 5.25 \end{array}$	Great Orme's Head from { Llanelian Mountain, Denbighsh. Llanelian Mountain, Anglesea - 38874.7* 100172.7*
LXXX.	Llanelian Mountain, Anglesea - - - Llwydiart Mountain - Great Orme's Head -	$\begin{array}{ccc} 46 & 36 & 31.75 \\ 105 & 49 & 45 \\ . & . & . \end{array}$	$\begin{array}{c} -0.10 \\ -0.58 \end{array}$	$\begin{array}{ccc} 46 & 36 & 31.76 \\ 105 & 49 & 44.25 \\ 27 & 33 & 44 \end{array}$	Great Orme's Head from { Llanelian Mountain, Anglesea Llwydiart Mountain - 100178* 75666.6
LXXXI.	Llanelian Mountain, Anglesea - - - Llwydiart Mountain - Signal Staff, Holyhead	$\begin{array}{ccc} 98 & 31 & 59 \\ 54 & 55 & 34 \\ . & . & . \end{array}$	$\begin{array}{c} -0.62 \\ -0.17 \end{array}$	$\begin{array}{ccc} 98 & 31 & 58.5 \\ 54 & 55 & 33.75 \\ 26 & 32 & 27.75 \end{array}$	Signal Staff, Holyhead, from { Llanelian Mountain, Anglesea Llwydiart Mountain - 88245.4 106631.7*



No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.  Feet.
LXXXII.	Moel Rhyddlad - - Llwydiart Mountain - Signal Staff, Holyhead	116 10 1,5 17 52 34,25 . . .	-0,68 -0,09 .	116 10 0,75 17 52 34,25 45 57 25	
	Signal Staff, Holyhead from { Moel Rhyddlad - Llwydiart Mountain				36469,3 106631,6*
LXXXIII.	Llwydiart Mountain - Rhiw Mountain - - Signal Staff, Holyhead	65 9 1 33 24 7,5 . . .	-1,32 -1,15 .	65 8 59,75 33 24 6,25 81 26 54	
	Rhiw Mountain from { Llwydiart Mountain - Signal Staff, Holyhead				191543,9* 175763,1
LXXXIV.	Llwydiart Mountain - Moel Rhyddlad - - Rhiw Mountain - -	83 1 35,25 71 53 58,5 . . .	-1,59 -1,19 .	83 1 33,75 71 53 57,25 25 4 29	
	Rhiw Mountain from { Llwydiart Mountain Moel Rhyddlad -				191540,4* 200022
LXXXV.	Moel Rhyddlad - - Rhiw Mountain - - Snowdon - - -	47 53 3,75 49 29 29 . . .	-1,47 -1,5 .	47 53 2,25 49 29 27,5 82 37 30,25	
	Rhiw Mountain from { Moel Rhyddlad Snowdon -				200017,7* 149608,4
LXXXVI.	Moel Rhyddlad - - Llwydiart Mountain - Ynaliog Mountain -	78 24 43 78 18 19,5 . . .	-1,12 -1,11 .	78 24 41,75 78 18 18,5 23 16 59,75	
	Ynaliog Mountain from { Moel Rhyddlad - Llwydiart Mountain				211568,7* 211649,7

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.  Feet.	
LXXXVII	Moel Rhyddlad - - Rhiw Mountain - - Ynaliog Mountain -	$\begin{array}{r} 6^{\circ} 30' 44.5 \\ 112^{\circ} 59' 8.75 \\ . \end{array}$	$\begin{array}{r} -0.22 \\ -1.65 \\ . \end{array}$	$\begin{array}{r} 6^{\circ} 30' 44.25 \\ 112^{\circ} 59' 7 \\ 60^{\circ} 30' 8.75 \end{array}$	   Ynaliog Mountain from { Moel Rhyddlad Rhiw Mountain	   211562.5° 26063.2
LXXXVIII	Moel Rhyddlad - - Llwydiart Mountain - Bwlch Mawr - -	$\begin{array}{r} 48^{\circ} 35' 21.75 \\ 95^{\circ} 4' 5 \\ . \end{array}$	$\begin{array}{r} -0.10 \\ -1.18 \\ . \end{array}$	$\begin{array}{r} 48^{\circ} 35' 21.75 \\ 95^{\circ} 4' 3.75 \\ 36^{\circ} 20' 34.5 \end{array}$	   Bwlch Mawr from { Moel Rhyddlad - Llwydiart Mountain	   143545.3° 168077.8
LXXXIX.	Moel Rhyddlad - - Rhiw Mountain - - Bwlch Mawr - -	$\begin{array}{r} 23^{\circ} 18' 36.75 \\ 39^{\circ} 47' 36.25 \\ . \end{array}$	$\begin{array}{r} -0.26 \\ -0.38 \\ . \end{array}$	$\begin{array}{r} 23^{\circ} 18' 36.5 \\ 39^{\circ} 47' 35.75 \\ 116^{\circ} 53' 47.75 \end{array}$	   Bwlch Mawr from { Moel Rhyddlad Rhiw Mountain	   143544.4° 88749.9
xc.	Rhiw Mountain - - Pengarn Mountain - - Bwlch Mawr - -	$\begin{array}{r} 67^{\circ} 56' 45.75 \\ 36^{\circ} 35' 43.5 \\ . \end{array}$	$\begin{array}{r} -0.93 \\ -0.73 \\ . \end{array}$	$\begin{array}{r} 67^{\circ} 56' 44.75 \\ 36^{\circ} 35' 42.75 \\ 75^{\circ} 27' 32.5 \end{array}$	   Pengarn Mountain from { Rhiw Mountain Bwlch Mawr -	   144101.3° 137976.8
xc1.	Rhiw Mountain - - Pengarn Mountain - - Snowdon - -	$\begin{array}{r} 58^{\circ} 14' 49.5 \\ 62^{\circ} 48' 16.25 \\ . \end{array}$	$\begin{array}{r} -1.40 \\ -1.46 \\ . \end{array}$	$\begin{array}{r} 58^{\circ} 14' 48 \\ 62^{\circ} 48' 14.75 \\ 58^{\circ} 56' 57.25 \end{array}$	   Pengarn Mountain from { Rhiw Mountain Snowdon -	   144101.6° 143027.1

Mean distance from Pengarn Mountain to Rhiw Mountain 144101.4 feet.

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Fect.
xcii.	Aberystwith Station -	$\begin{smallmatrix} 45 & 23 & 56,5 \end{smallmatrix}$	$-0,22$	$\begin{smallmatrix} 45 & 23 & 56,25 \end{smallmatrix}$	
	Pengarn Mountain -	$\begin{smallmatrix} 107 & 56 & 47,5 \end{smallmatrix}$	$-2,20$	$\begin{smallmatrix} 107 & 56 & 45,25 \end{smallmatrix}$	
	Rhiw Mountain -	$\begin{smallmatrix} 26 & 39 & 20 \end{smallmatrix}$		$\begin{smallmatrix} 26 & 39 & 18,5 \end{smallmatrix}$	
		$\begin{smallmatrix} 180 & 0 & 4 \end{smallmatrix}$			
Aberystwith* from		{ Rhiw Mountain - Pengarn Mountain		192534,5* 90794	
xciii.	Rhiw Mountain -	$\begin{smallmatrix} 84 & 54 & 5,5 \end{smallmatrix}$		$\begin{smallmatrix} 84 & 54 & 2 \end{smallmatrix}$	
	Aberystwith -	$\begin{smallmatrix} 39 & 44 & 28 \end{smallmatrix}$		$\begin{smallmatrix} 39 & 44 & 26,5 \end{smallmatrix}$	
	Snowdon -	$\begin{smallmatrix} . & . & . \end{smallmatrix}$		$\begin{smallmatrix} 55 & 21 & 31,5 \end{smallmatrix}$	
Aberystwith from		{ Rhiw Mountain - Snowdon -		192530,4* 233088,1	
Mean distance from Aberystwith station to Rhiw Mountain 192532,5 feet.					
xciv.	Aberystwith -	$\begin{smallmatrix} 60 & 6 & 50 \end{smallmatrix}$		$\begin{smallmatrix} 60 & 6 & 48,5 \end{smallmatrix}$	
	Rhiw Mountain -	$\begin{smallmatrix} 32 & 57 & 28 \end{smallmatrix}$		$\begin{smallmatrix} 32 & 57 & 27,5 \end{smallmatrix}$	
	Cader Idris -	$\begin{smallmatrix} . & . & . \end{smallmatrix}$		$\begin{smallmatrix} 86 & 55 & 44 \end{smallmatrix}$	
Cader Idris from		{ Aberystwith - Rhiw Mountain -		104891,8 167168,5*	
xcv.	Rhiw Mountain -	$\begin{smallmatrix} 6 & 18 & 12 \end{smallmatrix}$	$+0,09$	$\begin{smallmatrix} 6 & 18 & 12 \end{smallmatrix}$	
	Pengarn Mountain -	$\begin{smallmatrix} 140 & 14 & 21 \end{smallmatrix}$	$-2,26$	$\begin{smallmatrix} 140 & 14 & 18,75 \end{smallmatrix}$	
	Cader Idris -	$\begin{smallmatrix} . & . & . \end{smallmatrix}$		$\begin{smallmatrix} 33 & 27 & 29,25 \end{smallmatrix}$	
Cader Idris from		{ Rhiw Mountain - Pengarn Mountain		167171,4* 28696,5	

The distance from Rhiw Mountain to Snowdon, viz. 149608,4 feet, and the distance of Cader Idris from Rhiw Mountain, as found by the above triangle, viz. 167171,4 feet, together with the included angle at the latter station, give 139622,7 feet for the distance between Snowdon and Cader Idris.

Distance from Cynr y Brain Mountain to Garreg Mountain 97450 feet.

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
xcvi.	Cynr y Brain Mountain	112 12 59	-2,55	112 14 47,5	
	Garreg Mountain -	41 30 7	-9,16	41 30 7	
	Arran Fowddy -	.		26 17 5,5	
	Arran Fowddy Mountain from { Cynr y Brain Mountain Garreg Mountain -				145821,6* 203727,7

Distance from Long Mountain to Cynr y Brain Mountain 144778,5 feet.

xcvii.	Cynr y Brain Mountain	58 48 27,5	-1,39	58 48 26	
	Long Mountain -	60 57 38	-1,42	60 57 36,5	
	Arran Fowddy -	.		60 13 57,5	
	Arran Fowddy Mountain from { Cynr y Brain Mountain Long Mountain -				145818,1* 142673,8

Distance from Long Mountain to Stow Hill 104104,3 feet.

xcviii.	Long Mountain -	54 0 22,75	-0,69	54 0 22	
	Stow Hill -	67 32 20	-0,80	67 32 19	
	Blandinam Mountain or Peggwns Fawr -	58 27 20	-0,72	58 27 19	
		180 0 2,75			
	Blandinam Mountain from { Long Mountain Stow Hill -				112887,7 98832,9
xcxix.	Llandinam Mountain	93 14 18	-1,10	93 14 17	
	Long Mountain -	33 16 39	-0,49	33 16 38,5	
	Radnor Forest -	53 29 5	-0,46	53 29 4,5	
		180 0 2			
	Radnor Forest from { Llandinam Mountain Long Mountain -				77069,6* 140236,4

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
c.	Llandinam Mountain Stow Hill Radnor Forest	$\begin{array}{r} 34^{\circ} 46' 58'' \\ 51 \quad 3 \quad 12 \\ 94 \quad 9 \quad 50 \\ \hline 180 \quad 0 \quad 0 \end{array}$	$\begin{array}{r} -0,24 \\ -0,24 \\ -0,56 \end{array}$	$\begin{array}{r} 34^{\circ} 46' 57,75'' \\ 51 \quad 3 \quad 11,75 \\ 94 \quad 9 \quad 50,5 \end{array}$	77068,8* 56530
	Radnor Forest from { Llandinam Mountain Stow Hill				77068,8* 56530
ci.	Llandinam Mountain Radnor Forest Dwggan Mountain	$\begin{array}{r} 77 \quad 33 \quad 7 \\ 57 \quad 22 \quad 2 \\ . \quad . \quad . \end{array}$	$\begin{array}{r} -0,61 \\ -0,53 \end{array}$	$\begin{array}{r} 77 \quad 33 \quad 6,5 \\ 57 \quad 22 \quad 1,5 \\ 45 \quad 4 \quad 52 \end{array}$	91665,4 108279,3
	Dwggan Mountain from { Llandinam Mountain Radnor Forest				91665,4 108279,3
	Distance from Stow Hill to Cradle Mountain 152928,4 feet.				
cii.	Stow Hill Radnor Forest Cradle Mountain	$\begin{array}{r} 40 \quad 54 \quad 57,25 \\ 120 \quad 30 \quad 47 \\ . \quad . \quad . \end{array}$	$\begin{array}{r} +0,26 \\ -1,53 \end{array}$	$\begin{array}{r} 40 \quad 54 \quad 57,5 \\ 120 \quad 30 \quad 45,5 \\ 18 \quad 34 \quad 17 \end{array}$	56534,6* 116260,7
	Radnor Forest from { Stow Hill Cradle Mountain				56534,6* 116260,7
ciii.	Long Mountain Llandinam Mountain Arran Fowddy	$\begin{array}{r} 67 \quad 58 \quad 3,25 \\ 65 \quad 49 \quad 26 \\ . \quad . \quad . \end{array}$	$\begin{array}{r} -1,24 \\ -1,53 \end{array}$	$\begin{array}{r} 67 \quad 58 \quad 2 \\ 65 \quad 49 \quad 24,5 \\ 46 \quad 12 \quad 33,5 \end{array}$	142665,2* 144961
	Arran Fowddy from { Long Mountain Llandinam Mountain				142665,2* 144961
civ.	Llandinam Mountain Plynlimmon Arran Fowddy	$\begin{array}{r} 54 \quad 55 \quad 22 \\ 92 \quad 2 \quad 9,5 \\ . \quad . \quad . \end{array}$	$\begin{array}{r} -0,46 \\ -1,23 \end{array}$	$\begin{array}{r} 54 \quad 55 \quad 21,5 \\ 92 \quad 2 \quad 8,25 \\ 33 \quad 2 \quad 30,25 \end{array}$	79089,9* 118707,7
	Plynlimmon from { Llandinam Mountain Arran Fowddy				79089,9* 118707,7

# Trigonometrical Survey.

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Mean distance from Llandinam Mountain to Radnor Forest 77069,2 feet.

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
cv.	Llandinam Mountain	146° 0' 51,75	-2,31	146° 0' 49,5	
	Plynlimmon -	16 46 1,25	+0,73	16 46 2	
	Radnor Forest -	.		17 13 8,5	
	Plynlimmon from { Llandinam Mountain				79083,9*
	Radnor Forest -				149336,8

The distance from Llandinam Mountain to Long Mountain is 112887,7 feet, and from Plynlimmon 79089,9 feet. These distances, with the included angle at Llandinam Mountain, viz.  $120^{\circ} 44' 48",5$  give 167714,3 feet for the distance between Long Mountain and Plynlimmon.

cv.	Long Mountain -	57 5 6		57 5 4,5	
	Plynlimmon -	64 3 40,5		64 3 39	
	Arrennig -	.		58 51 16,5	
	Arrennig from { Long Mountain -				176219,4*
	Plynlimmon -				164503,7
cvii.	Long Mountain -	29 5 39	-0,92	29 5 38	
	Plynlimmon -	85 5 20	-1,57	85 5 18,5	
	Cader Idris -	.		05 49 3,5	
	Cader Idris from { Long Mountain				183172,6
	Plynlimmon -				89394,5*

Distance from Aberystwith Station to Cader Idris 104891,8 feet.

cviii.	Aberystwith -	57 53 27,5		57 53 27	
	Plynlimmon -	83 35 11,5		83 35 11	
	Cader Idris -	.		38 31 22	
	Plynlimmon from { Aberystwith -				65740,7
	Cader Idris -				89406,8*

# The Account of a

The distance from Garreg Mountain to Snowdon is 188872.5 feet, and from Arrennig 168780.8 feet. The included angle at Garreg Mountain is  $28^{\circ} 54' 0''$ . These data give 91343.2 feet for the distance from Arrennig to Snowdon. Also

The distance from Long Mountain to Arrennig is 176229.8 feet, and from Cader Idris 183172.6 feet. These, with the included angle at Long Mountain, viz.  $27^{\circ} 59' 26''$  give 87179.2 feet for the distance between Arrennig and Cader Idris.

Distance from Bar Beacon to The Wreckin 146522.3 feet.

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
cix	Bar Beacon -	26 47 0	-0.62	26 46 59.5	Feet.
	Brown Clay Hill	68 11 15.75	0.71	68 11 15	
	The Wreckin -			85 1 45.5	

Brown Clay Hill from { Bar Beacon 157228  
The Wreckin 71116.9

The distance from Brown Clay Hill to Bar Beacon is 157228 feet, and from the station on Malvern Hills 147682.1 feet. The included angle at Brown Clay Hill corrected for calculation is  $79^{\circ} 51' 34''$ . These data give 195843 feet for the distance between Bar Beacon and the station on Malvern Hills, and  $47^{\circ} 55' 41''.6$  for the angle at Bar Beacon between Brown Clay Hill and Malvern Hills. Again,

The distance from Corley to Broadway Beacon is 171568 feet, and from Bar Beacon 87132.7 feet. The angle at Corley, between Broadway Beacon and Bar Beacon, is  $96^{\circ} 33' 50''$ . This angle and these sides give 201110.7 feet for the distance between the two last stations, and  $57^{\circ} 56' 31''.5$  for the angle at Bar Beacon between Corley and Broadway Beacon.

Now the angle at Bar Beacon between Corley and Brown Clay Hill was observed, and found to be  $140^{\circ} 7' 5''$ . And if from this angle we subtract the two angles at Bar Beacon, as just found, viz.  $47^{\circ} 55' 41''.5$  and  $57^{\circ} 56' 31''.5$ , we shall get  $34^{\circ} 14' 52''$  for the angle at Bar Beacon between Broadway Beacon and the station on Malvern Hills. The distances from Bar Beacon to those two stations, are 201110.7 feet and 195843 feet respectively. These, with the angle at Bar Beacon,  $34^{\circ} 14' 52''$  give 116986.8 feet for the distance between Broadway Beacon and the station on Malvern Hills.

It may not be, perhaps, improper to state in this place, that a station towards the centre of this pentagon was chosen for the purpose of subdividing it into the necessary triangles. The spot selected was near Waltham, and observed from Broadway Beacon and Bar Beacon, forming the following triangle.

cix	Broadway Beacon	16 31 57	
	Bar Beacon -	39 4 45	
	Waltham -		from which, with the distance between Bar Beacon and Broadway Beacon, viz. 201110.7 feet, we get 153628.4 feet for the distance between Broadway Beacon and Waltham Hill, and 69348 feet between Bar Beacon and Waltham Hill.

When the party with the instrument were at the station on Brown Clay Hill, a

staff was erected over what was supposed to be the true station on Waltham Hill. It was accordingly observed; but, after the instrument was removed, some suspicions being entertained as to the identity of the point, the person appointed to fix the staff, stated that he could not find the marks put into the ground for distinguishing the station, and therefore chose another station as near to the former one as he well could guess. This, however, not being satisfactory, and the station conceived to be really lost, the instrument was not taken to Waltham Hill.

\* Distance from Stow on the Wold to Broadway Beacon 5203,2 feet.

No of Triangles	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
cx i	Stow on the Wold -	51° 44' 55.75	-0.19	51° 44' 55.5	
	Broadway Beacon -	78° 53' 7.75	-0.27	78° 53' 7.5	
	Cleeve -	49° 21' 57.75	-0.17	49° 21' 57	

180 0 1,25

Cleeve from { Stow on the Wold - 67499,3  
Broadway Beacon - 54020,6

cx ii.	Broadway Beacon	59° 28' 16	-0.4	59° 28' 16	
	Cleeve -	93° 4' 9	-0.21	93° 4' 9	
	Malvern Hills -	27° 27' 35	-0.19	27° 27' 35	

180 0 0

Malvern Hills from { Cleeve - 100909,6  
Broadway Beacon 116981,7\*

cx iii	Malvern Hills	64° 46' 19	-0.59	64° 46' 18,5	
	Cleeve -	48° 29' 40,5	0.61	48° 29' 40	
	May Hill -	66° 44' 2	-0.41	66° 44' 1,5	

180 0 1,5

May Hill from { Malvern Hill 82260\*  
Cleeve 99365,2

Distance from Cradle Mountain to Malvern Hills 185023,2 feet.

cx iv	May Hill -	97° 43' 34	-1.63	97° 43' 32,25	
	Malvern Hill	56° 8' 17,25	-0.53	56° 8' 16,75	
	Cradle Mountain			26° 8' 11	

\* May Hill from { Cradle Mountain 115047,6  
Malvern Hills - 82251,1\*



# The Account of a

From the triangle Malvern Hills, Cleeve, and May Hill, we find the distance from May Hill to the station on Malvern Hills is 82260 feet, which distance is found by using in calculation the base on Hounslow Heath; but in the last triangle, the distance between those two stations is found to be 82251,1 feet, which determination is the result of computing with the base line recently measured on Rhuddlan Marsh.

The mean distance, therefore, between May Hill and Malvern Hills is 82255,6 feet, which, used in the last triangle, gives 185033,4 feet for the side Cradle Mountain and Malvern Hills, and 155056,1 feet for the side Cradle Mountain and May Hill.

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
cxv.	Malvern Hills - -	40 14 17 "	-1,07	40 14 16 "	
	Trelleg Beacon - -	83 11 45,5	-1,92	83 11 43,5	
	Cradle Mountain -	. . .		56 34 0,5	
	Trelleg Beacon from { Malvern Hill - Cradle Mountain				155511,2 120372,3*
cxvi.	May Hill - -	49 56 24,25	-0,26	49 56 24	
	Trelleg Beacon -	92 37 48	-0,87	92 37 47	
	Cradle Mountain -	. . .		30 25 49	
	Trelleg Beacon from { Cradle Mountain May Hill -				120371,3* 79656,6
cxvii.	May Hill - -	69 12 37,75	-0,56	69 12 36	
	Trelleg Beacon -	59 21 23	-0,51	59 21 21,5	
	Symmond's Hall -	51 26 4	-0,47	51 26 2,5	
	Symmond's Hall from { May Hill - Trelleg Beacon				87650 95243,5
cxviii.	Symmond's Hall -	69 15 59	-1,13	69 15 58	
	Malvern Hills -	34 56 48,25	-0,88	34 56 37,25	
	Trelleg Beacon -	75 47 26	-1,13	75 47 24,75	
	Symmond's Hall from { Malvern Hills - Trelleg Beacon				161192,7 95240,5*

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Fect.
cxix.	Trelleg Beacon -	56 17 9,25	-0,6	56 17 8,75	
	Mynydd Mane -	78 56 8	-0,84	78 56 7	
	Cradle Mountain -	.	.	44 46 44,25	
	Mynydd Mane from { Trelleg Beacon - Cradle Mountain				86392,7 102023,6
cxx.	Mynydd Mane -	89 22 39,25	-1,34	89 22 38	
	Llangeinor Mountain -	42 1 14	-0,66	42 1 13,25	
	Cradle Mountain -	.	.	48 36 8,75	
	Llangeinor Mountain from { Cradle Mountain Mynydd Mane				152403,1 114330,3
cxxi.	Mynydd Mane -	37 25 37,5	-0,15	37 25 37,25	
	Llangeinor Mountain -	35 36 25	-0,17	35 36 25	
	Garth Hill -	106 57 58,5	-0,79	106 57 57,75	
		180 0 1			
	Garth Hill from { Mynydd Mane - Llangeinor Mountain				69594,5 72646
cxxii.	Llangeinor Mountain -	67 3 52,5	-0,36	67 3 53	
	Garth Hill -	51 2 32	-0,3	51 2 32,5	
	Ogmoor Down -	61 53 34,5	-0,35	61 53 34,5	
		179 59 59			
	Ogmoor Down from { Llangeinor Mountain Garth Hill				64043 75847,9

**ART. VI. Junction of the Triangles carried on in South Wales,  
with those southward of the Severn and Bristol Channel.**

Distance from Moor Lynch to the station on Mendip<sup>s</sup> Hills 78876.8 feet.

No. of Triangles	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation	Distances.
					Feet.
cxxxiii.	Moor Lynch	43 41 45	-0,27	43 41 44,75	
	Mendip -	61 17 47	-0,29	61 17 46,75	
	Blagdon	75 0 29	-0,35	75 0 28,5	
		180 0 1			
	Blagdon from { Moor Lynch -				71622
					56410,5
cxxxiv	Mendip -	33 39 30,5	-0 13	33 39 30,5	
	Blagdon -	91 46 4	0,33	91 46 4	
	Dundry Beacon	54 34 24,5	-0,12	54 34 25,5	
		180 0 0			
	Dundry Beacon from { Mendip -				69194,1
					38368,5

Distance from Moor Lynch to Pilsdon 118231,8 feet.

cxxv.	Moor Lynch	87 15 6		87 15	
	Pilsdon -	33 58 2		33 58	
	Bagborough	58 46 52		58 46 52	
		180 0 0			
	Bagborough from { Moor Lynch.				77243,7
					138092,8
cxxxvi.	Moor Lynch	117 40 36,75	-1,06	117 40 35,75	
	Bagborough	29 51 13,25	-0,05	29 51 13,25	
	Blagdon	32 28 11,5		32 28 11	
		180 0 1,5			
	Bagborough from { Moor Lynch				77243
					127418,5

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances, Feet.
cxxxvii.	Bagborough - -	131 59 32	.	131 59 32	
	Blagdon - -	19 57 6		19 57 6	
	Dunkery Beacon - -	28 3 22		28 3 22	
	180 0 0				
Dunkery Beacon from { Bagborough - Blagdon -					92441,6 201350
cxxxviii.	Bagborough - -	87 37 19,5	.	87 37 19	
	Dunkery Beacon - -	48 7 46,25		48 7 46	
	Flatholmes Lighthouse	.		44 14 55	
Flatholmes Lighthouse from { Bagborough - Dunkery Beacon					98652,6* 132367
cxxxix.	Bagborough - -	44 22 19,75	-0,63	44 22 19	
	Blagdon - -	50 29 22	-0,55	50 29 21,5	
	Flatholmes Lighthouse	.	.	85 8 19,5	
Flatholmes Lighthouse from { Bagborough - Blagdon -					98659* 89427,1*
cxxx.	Moor Lynch - -	55 38 59	-0,43	55 38 58,5	
	Blagdon - -	82 57 35	-0,6	82 57 34,5	
	Flatholmes Lighthouse	.	.	41 23 27	
* Flatholmes Lighthouse from { Moor Lynch - Blagdon -					107505,8 89431,3*

The mean distance from Blagdon to the Flatholmes Lighthouse, viz. 89429,2 feet, and the distance 38368,5 feet from the same station to Dunkery Beacon, with their included angle at Blagdon  $110^{\circ} 15' 49''$ , 75, give 108841 feet for the distance between Dunkery Beacon and the Lighthouse.

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
cxxx1.	Trelleg Beacon -	65° 20' 25,75	-0,88	65° 20' 25"	
	Symmond's Hall -	70 4 23,5	-0,98	70 4 22,5	
	Dundry Beacon -	. . .		44 35 12,5	
	Dundry Beacon from { Trelleg Beacon Symmond's Hall				127553,2 123303,1
cxxx11.	Trelleg Beacon -	79 23 13,5	-1,04	79 23 12,5	
	Mynydd Mane -	63 21 9	-0,71	63 21 8,25	
	Dundry Beacon -	. . .		37 15 39,25	
	Mynydd Mane from Dundry Beacon -				140270,6
cxxx111.	Ogmoor Down -	109 40 6,75	-1,43	109 40 5,25	
	Garth Hill -	42 42 28,75	-0,14	42 42 28,5	
	Dunkery Beacon -	. . .		27 37 26,25	
	Dunkery Beacon from { Ogmoor Down Garth Hill -				110951,7 154039
cxxxiv.	Ogmoor Down -	110 56 49,25	-2,42	110 56 46,75	
	Cefn Bryn -	31 35 27,25	-0,57	31 35 26,75	
	Dunkery Beacon -	. . .		37 27 46,5	
	Cefn Bryn from { Ogmoor Down Dunkery Beacon				128827,8 197804,7
cxxxv.	Llangeinor Mountain	13 36 8,25	+0,98	13 36 9,25	
	Garth Hill -	152 52 34	-2,55	152 52 31,5	
	Flatholmes Lighthouse	. . .		13 31 19,25	
	Flatholmes Lighthouse from { Llangeinor Mountain Garth Hill -				141653,2 73087,5

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
cxxxvi.	Llangeinor Mountain	61° 42' 51,5	"	61° 42' 51,5	
	Garth Hill - -	93 44 58		93 44 58	
	Dunkery Beacon -			24 32 10,5	
	Dunkery Beacon from Llangeinor Mountain				174562,8

The angle at the station on Llangeinor Mountain  $48^{\circ} 6' 43''$ , and the sides Llangeinor Mountain and Dunkery Beacon, Llangeinor Mountain and Flatholmes Lighthouse, as just found, give 13235,6 feet for the distance between Dunkery Beacon and Flatholmes Lighthouse, which deduction is founded on two base lines, viz. that measured on Rhuddlan Marsh, and that measured on Salisbury Plain. In a former triangle, viz. Bagborough, Dunkery Beacon, and Flatholmes Lighthouse, 132367 feet has been assigned for that distance, and proceeding directly from the base on Sedgemoor. The difference between the two results, all circumstances taken into the account, cannot be considered too great, the distance between Dunkery Beacon and the Flatholmes Lighthouse being something more than twenty-five miles.

The angle at Llangeinor Mountain  $49^{\circ} 12' 34''$ , with the sides Llangeinor Mountain, Mynydd Mane, and Llangeinor Mountain, Flatholmes Lighthouse, viz. 114330,3 feet, 141653,2 feet respectively, give 109437 feet for the distance between Mynydd Mane and the lighthouse on the Flatholmes, and  $78^{\circ} 30' 56'',5$  for the angle at Mynydd Mane. This angle taken from the observed angle at Mynydd Mane between Llangeinor Mountain and Dunkery Beacon  $128^{\circ} 20' 3'',7$ , leaves  $49^{\circ} 49' 7''$  for the corrected angle between Dunkery Beacon and the Lighthouse; which, with the side Mynydd Mane Dunkery Beacon 140270,6 feet, and the side Mynydd Mane Flatholmes Lighthouse 109437 feet give 108827,1 feet for the distance from Dunkery Beacon to the Lighthouse. This distance, previously computed and depending on the Sedgemoor base, is stated to be 108841 feet. Having thus joined the triangles north and south of the Severn and Bristol Channel, it will be now convenient to proceed with the calculation of the sides of the series proceeding from Ogmoor Down and Cefn Bryn along the southern coast of Wales.

cxxxvii.	Cefn Bryn • -	19 57 52	-0,11	19 57 52	
	Ogmoor Down -	43 7 52,75	-0,01	43 7 52,5	
	Margam Down -	116 54 16,5	-0,99	116 54 15,5	
		180 0 1,25	.		
	Margam Down from { Cefn Bryn - Ogmoor Down				98765,8 49325,3*

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
CXXXVIII.	Llangeinor Mountain	50 3 4,25	-0,08	50 3 4,25	
	Ogmoor Down -	34 21 34,25	-0,18	34 21 33,5	
	Margam Down - -	95 35 22,5	-0,23	95 35 22,25	
		180 0 1			
	Margam Down from { Llangeinor Mountain Ogmoor Down -				36317,3 49331,1*
CXXXIX.	Margam Down - -	32 1 12 .	-0,37	32 1 11	
	Cefn Bryn - -	91 3 16,25	-0,35	91 3 15	
	Lannon - -	56 55 34,5	-0,34	56 55 34	
		180 0 2,75			
	Lannon from { Margam Down - Cefn Bryn -				117843,6* 62492,6
CXL.	Lannon - -	90 51 8	-0,34	90 51 7,5	
	Cefn Bryn - -	57 55 38,25	-0,44	57 55 38	
	Marros Beacon - -	31 13 15 .	-0,36	31 13 14,5	
		180 0 1,25			
	Marros Beacon from { Lannon - Cefn Bryn				102163 120551,1
CXLI.	Marros Beacon -	115 22 29,5	-1,56	115 22 28	
	Lannon - -	28 46 25,25	-0,13	28 46 25	
	Precelly Top -	35 51 6,75	-0,15	35 51 7	
		180 0 1,5			
	Precelly Top from { Marros Beacon Lannon -				83962,5 157603
CXLII.	Marros Beacon -	83 40 20		83 40 20	
	Precelly Top -	47 19 13		47 19 13	
	Highgate Mountain -	49 0 27,5		49 0 27	
		180 0 0,5			
	Highgate Mountain from { Marros Beacon Precelly Top				81773,5 110560,7

No of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
CLXIII.	Highgate Mountain -	36 39 47	"	36 39 47	
	Plumstone Down -	98 31 13		98 31 13	
	Precelly Top -	. . .		44 49 0	
Plumstone Down from { Highgate Mountain Precelly Top -					78797.4 66753.5
CXLIV.	Precelly Top -	20 26 6	.	20 26 6	
	Plumstone Down -	140 0 42.75		140 0 41	
	St. Ann's Hill -	19 33 13		19 33 13	
St. Ann's Hill from { Precelly Top - Plumstone Down					128173.9 69637

At Precelly Top, the angle between St. Ann's Hill and Highgate Mountain is  $14^{\circ} 22' 54''$ . The distances from Precelly Top to those stations are 128173,9 feet and 110560,7 feet respectively. These data give 53271,6 feet for the distance between St. Ann's Hill and Highgate Mountain.

CXLV	Marros Beacon -	19 5 59.75	.	19 6 0	
	Highgate Mountain -	58 6 20.5		58 6 20	
	Newton Down -	102 47 40.5		102 47 40	
		180 0 0.75		.	
	Newton Down from { Marros Beacon - Highgate Mountain				

CXLVI	Marros Beacon -	64 34 25	.	64 34 25	
	Precelly Top -	50 17 43		50 17 43	
	Newton Down -	65 7 51.5		65 7 52	
	Newton Down from { Marros Beacon Precelly Top -				



*The Account of a*

No. of Triangles.	Names of Stations.	Observed Angles	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
CXLVII.	Precelly Top - -	41 50 29	"	41 50 29	
	Plumstone Down - -	85 23 56,5		85 23 57	
	Newton Down - -	52 45 34,5		52 45 34	
	180 0 0				
Newton Down from { Precelly Top - Plumstone Down					83580,6* 55934,4*
CXLVIII.	Plumstone Down - -	54 36 41	"	54 36 44	
	St. Ann's Hill - -	50 4 37		50 45 37	
	Newton Down - -	74 37 39,25		74 37 39	
	180 0 0,25				
Newton Down from { Plumstone Down St. Ann's Hill					55935,4* 58878,1
Distance from Margam Down to Llangeinor Mountain 36317,3 feet.					
CXLIX.	Margam Down - -	56 39 50,5	-0,05 -0,55	56 39 50,5	
	Llangeinor Mountain - -	104 20 9,5		104 20 9	
	Trecastle Beacon - -	. . .		19 0 0,5	
Trecastle Beacon from { Margam Down - Llangeinor Mountain					108076,2 93195,7
CL.	Margam Down - -	58 49 18	-0,83 -0,81	58 49 17,25	
	Lannon - -	56 12 10,5		56 12 9,75	
	Trecastle Beacon - -	. . .		64 58 33	
Lannon from { Margam Down - Trecastle Beacon					117843,1* 111268,8
CLI.	Lannon - -	74 9 13	-0,81 -0,69	74 9 12,25	
	New Inn Hill - -	63 13 18,25		63 13 17,5	
	Trecastle Beacon - -	. . .		42 37 30,25	
New Inn Hill from { Trecastle Beacon Lannon					119898,7 84402,8*

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
CLII.	Lannon - - - Precelly Top - - New Inn Hill - -	$\begin{array}{ccc} 0 & ' & '' \\ 53 & 5 & 25 \\ 32 & 15 & 36,75 \\ 94 & 38 & 58,75 \end{array}$ 180 0 0,5	$\begin{array}{c} -0,59 \\ -0,58 \\ -0,08 \end{array}$	$\begin{array}{ccc} 0 & ' & '' \\ 53 & 5 & 24,5 \\ 32 & 15 & 36,75 \\ 94 & 38 & 58,75 \end{array}$	   New Inn Hill from { Lannon - Precelly Top 84400,8* 126432,6
CLIII.	Precelly Top - - - New Inn Hill - - Capel Kynon - - -	$\begin{array}{ccc} 29 & 42 & 12 \\ 59 & 49 & 29 \\ 90 & 28 & 20,25 \end{array}$ 180 0 1,25	$\begin{array}{c} -0,34 \\ -0,42 \\ -0,8 \end{array}$	$\begin{array}{ccc} 29 & 42 & 12 \\ 59 & 49 & 28,5 \\ 90 & 28 & 19,5 \end{array}$	   Capel Kynon from { Precelly Top New Inn Hill 109303,4 62650,6
CLIV	Capel Kynon - - - New Inn Hill - - Talsarn - - -	$\begin{array}{ccc} 88 & 13 & 0,25 \\ 47 & 8 & 36 \\ 44 & 38 & 24,25 \end{array}$	$\begin{array}{c} -0,26 \\ -0,24 \end{array}$	$\begin{array}{ccc} 88 & 13 & 0,25 \\ 47 & 8 & 35,75 \\ 44 & 38 & 24 \end{array}$	   Talsarn from { Capel Kynon - New Inn Hill - 65361,8 89120,2*
CLV	Precelly Top - - - New Inn Hill - - Talsarn - - -	$\begin{array}{ccc} 29 & 12 & 47 \\ 106 & 58 & 5 \\ 43 & 49 & 9 \end{array}$	$\begin{array}{c} -1,11 \\ +0,06 \end{array}$	$\begin{array}{ccc} 29 & 12 & 47 \\ 106 & 58 & 4 \\ 43 & 49 & 9 \end{array}$	   Talsarn from { Precelly Top - New Inn Hill - 174655,6 89121,7*
CLVI.	New Inn Hill - - - Talsarn - - - Trecastle Beacon - -	$\begin{array}{ccc} 95 & 9 & 38,5 \\ 50 & 4 & 50,25 \\ . & . & . \end{array}$	$\begin{array}{c} -0,54 \\ -0,27 \end{array}$	$\begin{array}{ccc} 95 & 9 & 38 \\ 50 & 4 & 50 \\ 34 & 45 & 32 \end{array}$	   Talsarn from Trecastle Beacon - 155698,6

*The Account of a*

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances. Feet.
CLVII.	Talsarn - -	50 46 43	-0,33	50 46 42,75	
	Tregarron Down -	98 53 1	-1,15	98 53 0	
	Trecastle Beacon -	. . .		24 20 17,25	
Tregarron Down from { Talsarn -					64945,7*
Trecastle Beacon					131832,6
Distance from Aberystwith to Plynlimmon 65740,7 feet.					
CLVIII.	Aberystwith - -	66 50 30	-0,4	66 50 29,5	
	Plynlimmon - -	68 46 0	-0,46	68 45 59,5	
	Tregarron Down -	44 23 31,5	-0,32	44 23 31	
		180 0 1,5			
Tregarron Down from { Aberystwith					87594,4
Plynlimmon					86401,7
CLIX.	Aberystwith - -	45 36 55	-0,31	45 36 54	
	Tregarron Down -	59 51 8	-0,35	59 51 6	
	Talsarn - -	74 32 1,5	-0,46	74 32 0	
		180 0 4,5			
Talsarn from { Aberystwith -					78591,5
Tregarron Down					64952*
CLX.	Plynlimmon - -	87 12 51	-0,75	87 12 50,25	
	Llandinam Mountain	49 3 8	-0,36	49 3 7,5	
	Tregarron Down -	43 44 2	-0,33	43 44 2,25	
		180 0 1			
Tregarron Down from { Plynlimmon - -					86411,3
Llandinam Mountain					114270,5
CLXI.	Llandinam Mountain	49 37 26,5	-1,38	49 37 25	
	Tregarron Down -	96 31 45	-2,05	96 31 43	
	Capellante - -	. . .		33 50 52	
Capellante from { Llandinam Mountain					203827,2
Tregarron Down -					156290,2

The angle at Stow Hill, between Llandinam Mountain and Cradle Mountain, is  $91^{\circ} 58' 6''$ . The distances from Stow Hill to those stations are 98832.9 feet and 152928.4 feet respectively. From these data, we get 184914.3 feet for the distance between Llandinam Mountain and Cradle Mountain, and  $55^{\circ} 44' 40''$  for the angle at the former station. The observed angle at Llandinam Mountain between Stow Hill and Capellante is  $82^{\circ} 7' 18''$ ; from which, subtracting  $55^{\circ} 44' 40''$ , we get  $26^{\circ} 22' 38''$  for the angle between Capellante and Cradle Mountain. This angle, with the distances 184914.3 feet and 203827.2 feet, give 90585.6 feet for the distance from Cradle Mountain to Capellante.

Distance from Mynydd Mane to Llangeinor Mountain 114330.3 feet.

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
CLXII.	Mynydd Mane • • • Llangeinor Mountain Capellante - -	$41^{\circ} 35' 36.25''$ $71^{\circ} 54' 47.5''$ • • •	$-0.6''$ $-0.81''$ • • •	$41^{\circ} 35' 35.75''$ $71^{\circ} 54' 46.75''$ $66^{\circ} 29' 37.5''$	Feet.
	Capellante from { Mynydd Mane - - Llangeinor Mountain -				118515.7 82765

The observed angle at Mynydd Mane, between Cradle Mountain and Capellante, is  $47^{\circ} 47' 3''$ , and the distances from Mynydd Mane to those stations 102023.4 feet and 118515.7 feet respectively. Hence we find the distance from Capellante to Cradle Mountain 90585.8 feet: The previous determination is 90585.6 feet. The angle at Llangeinor Mountain is  $31^{\circ} 1' 40''$ . The distances of that station from Trecasle Beacon and Capellante are 93195.7 feet and 82765 feet. This angle and those sides give 48125.8 feet for the distance between the latter stations.

ART. VII. *Calculation of the Sides of the principal Triangles proceeding from the northern Parts of Wales and Cheshire, through Lancashire and the northern Parts of Derbyshire into Yorkshire.*

Distance from Llanellian Mountain to Cynr y Brain Mountain 145773.8 feet.

CLXIII.	Llanellian Mountain - Cynr y Brain Mountain Billinge Beacon -	$55^{\circ} 42' 37.75''$ $86^{\circ} 53' 48''$ • • •	$-1.9''$ $-4.48''$ • • •	$55^{\circ} 42' 35.75''$ $86^{\circ} 53' 43.5''$ $37^{\circ} 23' 40.75''$	
	Billinge Beacon from { Llanellian Mountain - Cynr y Brain Mountain -				239683 198316.3*

## Cyrn y Brain Mountain from Delamere Forest 126431,6 feet.

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
CLXIV.	Cyrn y Brain Mountain	27° 41' 46,75	-0,12	27° 41' 46,5	
	Delamere Forest -	118 4 28	-2,7	118 4 25,25	
	Billinge Beacon - -	34 13 47,75	+0,5	34 13 48,25	
		180 0 2,5			
	Billinge Beacon from { Cyrn y Brain Mountain Delamere Forest -				198315,8* 104465,1
	Delamere Forest from Garreg Mountain 137294 feet.				

CLXV.	Delamere Forest -	74 56 56	-1,26	74 56 54,75	
	Garreg Mountain -	42 28 45,5	-0,92	42 28 44,5	
	Billinge Beacon -	.		62 34 28,75	
	Billinge Beacon from { Delamere Forest - Garreg Mountain -				104462 149374,3

Mean distance from Delamere Forest to Billinge Beacon 104463,5 feet.

CLXVI.	Heswell Hill -	61 10 55,75	-0,62	61 10 55,25	
	Billinge Beacon -	56 47 7,25	-0,69	56 47 6,5	
	Delamere Forest -	.		62 1 58,25	
	Heswell Hill from { Delamere Forest Billinge Beacon				99750,3* 105305,7*
CLXVII.	Delamere Forest -	56 2 30	-0,76	56 2 29,25	
	Heswell Hill -	74 28 39,5	-0,96	74 28 38,5	
	Cyrn y Brain Mountain	.		49 28 52,25	
	Heswell Hill from { Delamere Forest - Cyrn y Brain Mountain -				99750,8* 108837,6

The distances from Cyrn y Brain Mountain to Heswell Hill and Garreg Mountain are 108837,6 feet and 97450 feet. The included angle at Cyrn y Brain Mountain is 24° 54' 22". These data give 45852,5 feet for the distance between Garreg Mountain and Heswell Hill, which distance is here found, as the same will be used in fixing the situations of several interior points.

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
CLXVIII.	Billinge Beacon -	24 5 16,25	+0,06	24 5 16,25	
	Belle-field Hill - -	126 53 18,25	-0,79	126 53 17,5	
	Delamere Forest -	29 1 26,25		29 1 26,25	
		180 0 0,75			
	Belle-field Hill from { Delamere Forest Billinge Beacon				53307,1 63369,2
CLXIX	Billinge Beacon -	80 52 23,5	-0,6	80 52 23	
	Belle-field Hill -	65 49 38,5	-0,47	65 49 38	
	Heswell Hill - - -	. . .		33 17 59	
	Heswell Hill from { Billinge Beacon - Belle-field Hill -				105301,3* 113961,3
CLXX.	Delamere Forest -	114 8 32	-2,09	114 8 30	
	Billinge Beacon - .	34 1 8,5	-0,17	34 1 8,25	
	Mow Copt - .	. . .		31 50 21,75	
	Mow Copt from { Delamere Forest Billinge Beacon				110785,8 180701

The distance from Delamere Forest to Mow Copt, as formerly found, is 110780,5 feet. The last triangle being recomputed, and the mean distance from Delamere Forest to Mow Copt, viz. 110783,1 feet being taken as its base, we get 180696,4 feet for the distance between Billinge Beacon and Mow Copt.

CLXXI	Billinge Beacon -	83 9 46,75	-2,09	83 9 44,75	
	Wittle Hill - -	62 46 19	-1,4	62 46 17,5	
	Mow Copt - -	. . .		34 3 57,75	
	Wittle Hill from { Billinge Beacon Mow Copt -				113830,4 201769,4

Mean distance from Billinge Beacon to Heswell Hill 105303,5 feet.

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
CLXXII.	Billinge Beacon -	62° 54' 17.75"	-0.25	62° 54' 19.75"	
	Heswell Hill -	26° 17' 30.25"	-0.25	26° 17' 30"	
	Go Hill -	90° 48' 10.75"	-0.52	90° 48' 10.25"	
		179° 59' 58.75"			
	Go Hill from { Billinge Beacon - Heswell Hill -				46647.8 93756.3
CLXXIII.	Billinge Beacon -	108° 16' 15.25"	-0.48	108° 16' 14.75"	
	Go Hill -	41° 51' 23.75"	-0.17	41° 51' 23.5"	
	Rivington Hill -	. . .		29° 52' 21.75"	
	Rivington Hill from { Billinge Beacon Go Hill -				62493.7* 88934.6
CLXXIV.	Billinge Beacon -	107° 57' 2.75"	-0.63	107° 57' 2"	
	Belle-field Hill -	35° 44' 1"	-0.12	35° 44' 1"	
	Rivington Hill -	. . .		36° 18' 57"	
	Rivington Hill from { Billinge Beacon Belle-field Hill				62489.9* 101791.6
CLXXV.	Billinge Beacon -	71° 42' 21"	-0.39	71° 42' 20.5"	
	Go Hill -	90° 14' 44.75"	-0.78	90° 14' 44"	
	Bleasdale Forest -	. . .		18° 2' 55.5"	
	Bleasdale Forest from { Billinge Beacon Go Hill -				150560.2 142951.6
CLXXVI.	Billinge Beacon -	51° 25' 20.25"	-0.88	51° 25' 19.25"	
	Wittle Hill -	80° 23' 7.5"	-1.34	80° 23' 6.25"	
	Bleasdale Forest -	. . .		48° 11' 34.5"	
	Wittle Hill from { Billinge Beacon Bleasdale Forest				113825.5* 119379





No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
CLXXX.	Wittle Hill - -	37° 7' 29.5"	-0.46	37° 7' 29"	
	Axedge - -	30° 42' 14"	+0.19	30° 42' 14"	
	Holme Moss - -	. . .		112° 10' 17"	
	Holme Moss from { Wittle Hill - Axedge -				95339.7 112695.5

The sides Orpit Heights and Hathersage, and Orpit Heights and Weaver Hill, viz. 101660.3 feet, and 71095.7 feet, with their included angle  $97^{\circ} 49' 56''$ , give 131754.5 feet for the distance between Hathersage and Weaver Hill. The angles at Weaver Hill and Hathersage are then found to be  $49^{\circ} 51' 10''$ , and  $32^{\circ} 18' 54''$  respectively.

CLXXXI.	Hathersage - -	67° 29' 48.5"		67° 29' 47.5"	
	Weaver Hill - -	23° 28' 15"		23° 28' 14.5"	
	Lord's Seat - -	89° 1' 59"		89° 1' 58"	
		180° 0' 0.25"			
	Lord's Seat from { Hathersage - Weaver Hill -				52482.6 121740
CLXXXII.	Hathersage - -	30° 12' 46"		30° 12' 46"	
	Lord's Seat - -	117° 19' 51"		117° 19' 51"	
	Axedge - -	. . .		32° 27' 23"	
	Axedge from { Hathersage - - Lord's Seat - -				86878.2 49212.5
CLXXXIII.	Boulsworth Hill - -	76° 12' 12.75"	-0.75	76° 12' 12"	
	Wittle Hill - -	72° 3' 55"	-0.29	72° 3' 54.75"	
	Bleasdale Forest - -	. . .		31° 43' 53.25"	
	Boulsworth Hill from { Wittle Hill - Bleasdale Forest				64650.8 116951.5

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
CLXXXIV.	Boulsworth Hill - Ingleborough - Bleasdale Forest -	$\begin{array}{ccc} 0 & 1 & 5 \\ 45 & 51 & 56,5 \\ 54 & 11 & 29,75 \\ . & . & . \end{array}$	$\begin{array}{c} -0,81 \\ -0,82 \end{array}$	$\begin{array}{ccc} 0 & 1 & 5 \\ 45 & 51 & 55,75 \\ 54 & 11 & 29 \\ 79 & 56 & 35,25 \end{array}$	
	Ingleborough from {	Boulsworth Hill - Bleasdale Forest -			141995' 103501,1
CLXXXV.	Wittle Hill - Boulsworth Hill - Pendle Hill -	$\begin{array}{ccc} 37 & 17 & 23 \\ 82 & 41 & 17,5 \\ . & . & . \end{array}$	$\begin{array}{c} -0,18 \\ -0,29 \\ . \end{array}$	$\begin{array}{ccc} 37 & 17 & 22,75 \\ 82 & 41 & 17,25 \\ 60 & 1 & 20 \end{array}$	
	Pendle Hill from {	Wittle Hill - Boulsworth Hill			74028,7 45217,6
CLXXXVI.	Boulsworth Hill - Ingleborough - Pendle Hill -	$\begin{array}{ccc} 39 & 22 & 48,25 \\ 15 & 0 & 12,5 \\ . & . & . \end{array}$	$\begin{array}{c} +0,4 \\ -0,03 \end{array}$	$\begin{array}{ccc} 39 & 22 & 48,75 \\ 15 & 0 & 12,5 \\ 125 & 36 & 58,75 \end{array}$	
	Ingleborough from {	Boulsworth Hill - Pendle Hill -			141923,6' 110820,5
CLXXXVII.	Boulsworth Hill - Rumbles Moor - Pendle Hill -	$\begin{array}{ccc} 127 & 47 & 26,75 \\ 20 & 24 & 6 \\ . & . & . \end{array}$	$\begin{array}{c} -0,77 \\ +0,04 \end{array}$	$\begin{array}{ccc} 127 & 47 & 26 \\ 20 & 24 & 6 \\ 31 & 48 & 28 \end{array}$	
	Rumbles Moor from {	Boulsworth Hill - Pendle Hill			68367,6' 102505,8
CLXXXVIII.	Ingleborough - Boulsworth Hill - Great Whernside -	$\begin{array}{ccc} 62 & 41 & 7,75 \\ 36 & 31 & 3 \\ . & . & . \end{array}$	$\begin{array}{c} -0,77 \\ -0,68 \end{array}$	$\begin{array}{ccc} 62 & 41 & 7 \\ 36 & 31 & 2,25 \\ 80 & 47 & 50,75 \end{array}$	
	Great Whernside from {	Ingleborough - Boulsworth Hill			85598 127807,4

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
CLXXXIX	Boulsworth Hill - Rumbles Moor - Great Whernside -	$\begin{array}{ccc} 51 & 53 & 35,75 \\ 95 & 57 & 50,25 \\ . & . & . \end{array}$	$\begin{array}{c} -0,34 \\ -0,93 \end{array}$	$\begin{array}{ccc} 51 & 53 & 35,5 \\ 95 & 57 & 49,25 \\ 32 & 8 & 35,25 \end{array}$	
	Rumbles Moor from {			Boulsworth Hill - Great Whernside -	68368,2* 101114
CXC.	Wittle Hill - Boulsworth Hill - Holme Moss -	$\begin{array}{ccc} 87 & 16 & 40,75 \\ 57 & 44 & 11,75 \\ . & . & . \end{array}$	$\begin{array}{c} -0,63 \\ -0,48 \end{array}$	$\begin{array}{ccc} 87 & 16 & 40 \\ 57 & 44 & 11 \\ 34 & 59 & 9 \end{array}$	
	Holme Moss from {			Wittle Hill - Boulsworth Hill	95345,9 112627,8
CXCI.	Boulsworth Hill - Rumbles Moor - Holme Moss -	$\begin{array}{ccc} 91 & 47 & 1,25 \\ 57 & 26 & 32 \\ . & . & . \end{array}$	$\begin{array}{c} -0,95 \\ -0,44 \end{array}$	$\begin{array}{ccc} 91 & 47 & 0,25 \\ 57 & 26 & 31,5 \\ 30 & 46 & 28,25 \end{array}$	
	Rumbles Moor from {			Boulsworth Hill Holme Moss -	68372,9* 133564,6
CXCII.	Rumbles Moor - Ledstone Beacon - Holme Moss -	$\begin{array}{ccc} 72 & 16 & 31,75 \\ 58 & 20 & 17,5 \\ . & . & . \end{array}$	$\begin{array}{c} -1,35 \\ -1,11 \end{array}$	$\begin{array}{ccc} 72 & 16 & 30,25 \\ 58 & 20 & 16,5 \\ 49 & 23 & 13,25 \end{array}$	
	Ledstone Beacon from {			Rumbles Moor Holme Moss -	119122,5 149471,8
CXCIII.	Ledstone Beacon - Staincross Heights - Holme Moss -	$\begin{array}{ccc} 23 & 7 & 23,5 \\ 135 & 5 & 7 \\ . & . & . \end{array}$	$\begin{array}{c} +0,4 \\ -0,71 \end{array}$	$\begin{array}{ccc} 23 & 7 & 24 \\ 135 & 5 & 6,25 \\ 21 & 47 & 29,75 \end{array}$	
	Staincross Heights from {			Holme Moss - Ledstone Beacon	83136,9 78589,6
	Clifton Beacon from Hathersage	92227,2 feet. Phil. Trans. 1803, p. 432.			

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Fect.
cxciv.	Clifton Beacon -	24 16 10	-0,18	24 16 9,75	
	Hathersage -	64 19 9,75	-0,18	64 19 9,5	
	Bradfield Point -			91 24 40,75	
Bradfield Point from { Clifton Beacon Hathersage -					83142,4 37919,4
cxcv.	Clifton Beacon -	41 38 23,5	-0,29	41 38 23,25	
	Staincross Heights -	72 8 43,5	-0,39	72 8 43	
	Bradfield Point -			66 12 53,75	
Staincross Heights from { Clifton Beacon - Bradfield Point -					79930,4 58039
cx cvi.	Clifton Beacon -	65 54 33,5	-0,56	65 54 33	
	Hathersage -	50 45 26,75	-0,49	50 45 26,25	
	Staincross Heights -			63 20 0,75	
Staincross Heights from { Clifton Beacon Hathersage -					79929,2 94215,5
Clifton Beacon from Gringley Beacon 75068,1. Phil. Trans. 1803, p. 431.					
cx cvii.	Clifton Beacon -	46 29 0,25	-0,34	46 29 0	
	Crowle Beacon -	46 54 35,5	-0,34	46 54 35	
	Gringley Beacon -			86 36 25	
Crowle Beacon from { Clifton Beacon Gringley Beacon					102613,6 74543,4
cx cviii.	Clifton Beacon -	32 31 5,5	-0,39	32 31 5	
	Crowle Beacon -	92 5 22	-0,84	92 5 21	
	Hemingbrough Spire			55 23 34	
Hemingbrough Spire from { Clifton Beacon Crowle Beacon					124589,7 67019,7

No. of Triangles.	Names of Stations.	Observed Angles.	Diff	Angles corrected for Calculation.	Distances.
ccix.	Crowle Beacon -	67° 54' 2,25	-0,45	67° 54' 1,75	Feet.
	Hunsley Beacon -	44 58 20,25	-0,37	44 58 20	
	Hemingbrough Spire	. . .		67 7 38,25	
	Hunsley Beacon from { Crowle Beacon - Hemingbrough Spire				87370 87859,4
cc.	Hunsley Beacon -	68 22 50,25	-0,58	68 22 49,75	
	Wilton Beacon -	58 16 37,25	-0,51	58 16 36,75	
	Hemingbrough Spire -	. . .		53 20 33,5	
	Wilton Beacon from { Hunsley Beacon - Hemingbrough Spire				82862,3 96024,9
cci.	Wilton Beacon -	103 58 59,75	-1,92	103 58 58	
	Hambleton Down -	30 46 30,5	-0,5	30 46 30	
	Hemingbrough Spire -	. . .		45 14 32	
	Hambleton Down from { Wilton Beacon - Hemingbrough Spire				133262,7 182109,2
ccii.	Wilton Beacon -	126 5 51,5	-3,84	126 5 47,75	
	Botton Head -	19 20 11,5	+0,05	19 20 11,5	
	Hemingbrough Spire	. . .		34 34 0,75	
	Botton Head from { Wilton Beacon - Hemingbrough Spire				164538,6 234330,1
cciii.	Hambleton Down -	107 11 36,5	-1,44	107 11 35	
	Wilton Beacon -	22 6 51,5	-0,37	22 6 51	
	Botton Head -	50 41 34,5	-0,12	50 41 34	
	Botton Head from { Hambleton Down Wilton Beacon -				64835,5 164531,2

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
CCIV.	Botton Head - -	62° 15' 1"	+0,1	62° 15' 2"	
	Wilton Beacon - -	11 53 28,5	-0,3	11 23 29	
	Loosehoe Moor - -	105 51 29,5	-0,94	105 51 29	
		179 59 59			
	Loosehoe Moor from { Botton Head Wilton Beacon				35244,2 151369,7
CCV.	Botton Head - -	51 0 23	-0,07	51 0 23	
	Loosehoe Moor - -	102 46 14	-0,33	102 46 14	
	Easington Heights -	26 13 22,5	-0,1	26 13 23	
		179 59 59,5			
	Easington Heights from { Botton Head Loosehoe Moor				77788,9 61992,3
CCVI.	Botton Head - -	100 48 4,5	-0,31	100 48 4	
	Loosehoe Moor - -	50 4 54	-0,07	50 4 54	
	Barnaby Moor Pole -	. . .	.	29 7 2	
	Barnaby Moor Pole from { Botton Head Loosehoe Moor				55550,7 71146,5
CCVII.	Botton Head - -	49 47 41,25	-0,22	49 47 41	
	Easington Heights -	45 20 6,75	-0,21	45 20 6,5	
	Barnaby Moor Pole -	. . .		84 52 12,5	
	Barnaby Moor Pole from { Botton Head - Easington Heights				55548,3 59649,7
CCVIII.	Easington Heights -	5 50 55	.	5 50 55	
	Burleigh Moor - -	160 23 52,5		160 23 52	
	Barnaby Moor Pole -	. . .		13 45 13	
	Burleigh Moor from { Easington Heights Barnaby Moor Pole				42270,7 18117,6

The distance from Easington Heights to Botton Head, and Easington Heights to Burleigh Moor, with the included angle at Easington Heights  $51^{\circ} 11' 2''$ , give 60956,5 for the distance between Botton Head and Burleigh Moor.

Rumbles Moor from Ledstone Beacon 119122,5 feet.

No of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
ccix.	Rumbles Moor -	$67^{\circ} 1' 23,75''$	$-1,57$	$67^{\circ} 1' 23,25''$	Feet.
	Ledstone Beacon -	$73^{\circ} 49' 9,25''$	$-1,76$	$73^{\circ} 49' 8,75''$	
	Hambleton Down -	$39^{\circ} 9' 28,5''$	$-1,3$	$39^{\circ} 9' 28''$	
		$180^{\circ} 0' 1,5''$			
Hambleton Down from { Ledstone Beacon					173679,7
Rumbles Moor -					181173,7
ccx	Ledstone Beacon -	$84^{\circ} 34' 0,75''$	$-0,74$	$84^{\circ} 34' 0''$	
	Hambleton Down -	$23^{\circ} 44' 1,25''$	$-0,76$	$23^{\circ} 44' 0,5''$	
	Hemingbrough Spire -	$\cdot \cdot \cdot$		$71^{\circ} 41' 59,5''$	
		$\cdot \cdot \cdot$			
Hemingbrough Spire from { Ledstone Beacon -					73626,8
Hambleton Down					182109,8

Ledstone Beacon from Staincross Heights 78589,6 feet.

ccxi.	Ledstone Beacon -	$120^{\circ} 9' 10,75''$	$-1,16$	$120^{\circ} 9' 9,75''$	
	Staincross Heights -	$28^{\circ} 50' 54,75''$	$-0,01$	$28^{\circ} 50' 54,75''$	
	Hemingbrough Spire -	$\cdot \cdot \cdot$		$30^{\circ} 59' 55,5''$	
		$\cdot \cdot \cdot$			
Hemingbrough Spire from { Ledstone Beacon					73626,7
Staincross Heights					131947,6

Rumbles Moor from Great Whernside 101114 feet.

ccxii.	Rumbles Moor -	$67^{\circ} 17' 44''$	$-1,26$	$67^{\circ} 17' 42,75''$	
	Hambleton Down -	$33^{\circ} 16' 29,25''$	$-1,05$	$33^{\circ} 16' 28,25''$	
	Great Whernside -	$\cdot \cdot \cdot$		$79^{\circ} 25' 49''$	
		$\cdot \cdot \cdot$			
Hambleton Down from { Rumbles Moor					181168,6
Great Whernside					170013,8

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
CCXIII.	Hambleton Down -	82 56 29,5	-0,26	82 56 29,25	Feet.  23120,9* 148740,1
	Black Hambleton Down	89 14 35,75	-0,43	89 14 35,25	
	Great Whernside -	. . .		7 48 55,5	
	Black Hambleton Down from { Hambleton Down Great Whernside				
CCXIV.	Hambleton Down -	42 55 24,5		42 55 24,5	23117,9* 50427,7
	Black Hambleton Down	118 53 4		118 53 4	
	Botton Head -	. . .		18 11 31,5	
	Black Hambleton Down from { Hambleton Down Botton Head				
CCXXV.	Rumbles Moor -	6 11 6,75	-0,14	6 11 6,75	192504,6* 23119*
	Hambleton Down -	116 12 57,25	-1,49	116 12 55,5	
	Black Hambleton Down	57 35 59,25	+0,77	57 35 57,75	
	Black Hambleton Down from { Rumbles Moor - Hambleton Down				
CCXVI.	Rumbles Moor -	73 12 30	-1,88	73 12 28	192504* 194930,8
	Ledstone Beacon -	70 59 12	-1,81	70 59 10,25	
	Black Hambleton Down	. . .		35 48 21,75	
	Black Hambleton Down from { Rumbles Moor - Ledstone Beacon				



ART. VIII. *Triangles for ascertaining the Situation of the Great Tower on York Minster.*

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Fect.
CCXVII.	Wilton Beacon -	75° 45' 15"	"	75° 45' 15"	
	Botton Head - -	24° 40' 15"		24° 40' 15"	
	York Minster -	. . .		79° 34' 30"	
York Minster from { Wilton Beacon Botton Head -					69830.4 <sup>*</sup> 162152
CCXVIII.	Wilton Beacon -	53° 38' 13.5"		53° 38' 13.5"	
	Hambleton Down -	31° 28' 24"		31° 28' 24"	
	York Minster - -	. . .		94° 53' 32.5"	
York Minster from { Wilton Beacon - Hambleton Down					69830.8 <sup>*</sup> 107705.4 <sup>*</sup>
CCXIX.	Hambleton Down -	62° 11' 41"		62° 11' 41"	
	Rumbles Moor -	36° 2' 20.25"		36° 2' 20.25"	
	York Minster - -	. . .		81° 45' 58.75"	
York Minster from { Hambleton Down Rumbles Moor -					107699.6 <sup>*</sup> 161921.9 <sup>*</sup>
CCXX.	Rumbles Moor -	30° 59' 3"		30° 59' 3"	
	Ledstone Beacon -	103° 17' 41.75"		103° 17' 41.75"	
	York Minster -	. . .		45° 43' 15.25"	
York Minster from { Rumbles Moor - Ledstone Beacon -					161925 <sup>*</sup> 85654.8

**ART. IX.** *Calculation of the Sides of the principal Triangles proceeding from Lancashire and Yorkshire through Westmoreland, Cumberland, Durham, and Northumberland, and a part of the South of Scotland.*

Go Hill from Bleasdale Forest 142951,6 feet.

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.  Feet.
ccxxi.	Go Hill -	41° 20' 5"	-0,61	41° 20' 4,5"	
	Beryl Hill -	91° 29' 55,5"	-1,26	91° 29' 54,25"	
	Bleasdale Forest			47° 10' 1,25"	

Beryl Hill from { Go Hill - 104867,8  
Bleasdale Forest 94445,5

ccxxii.	Go Hill -	131° 34' 49,5"	-1,49	131° 34' 48"	
	Beryl Hill -	14° 24' 30,75"	+0,06	14° 24' 30,75"	
	Billinge Beacon			34° 0' 41,25"	

Beryl Hill from Billinge Beacon 140239,8

Ingleborough Hill from Bleasdale Forest 103501,1 feet.

ccxxiii.	Ingleborough Hill -	71° 49' 43,5"	-2,01	71° 49' 41,5"	
	Black Comb -	30° 5' 35"	-0,13	30° 5' 34,75"	
	Bleasdale Forest -			78° 4' 43,75"	

Black Comb from { Ingleborough Hill 201970,5  
Bleasdale Forest - 196127

The sides Bleasdale Forest to Black Comb 196127 feet, and Bleasdale Forest to Beryl Hill 94445,5 feet, together with 94° 28' 38" the corrected angle at Beryl Hill, give 164674,5 feet for the distance between Beryl Hill and Black Comb.

No of Triangles	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
ccxxiv.	Ingleborough Hill -	35 15 15,5	-1,08	35 15 14,5	
	Black Comb -	65 15 43,5	-1,63	65 15 42	
	Helvellin Mountain -	. . .		79 29 3,5	
	Helvellin Mountain from { Ingleborough Hill Black Comb -				186568,6 118569,2
ccxxv.	Ingleborough Hill -	61 35 33	-0,51	61 35 32	
	Black Comb -	22 28 19	-0,78	22 28 18	
	The Calf -	95 56 12,25	-2,04	95 56 10	
	The Calf from { Ingleborough Hill Black Comb -				77614,6 178607,5*
ccxxvi.	Black Comb -	42 47 24,5	-0,89	42 47 23,5	
	The Calf -	41 19 33	-0,75	41 19 32,25	
	Helvellin Mountain -	. . .		95 53 4,25	
	The Calf from { Black Comb - Helvellin Mountain				178612,2* 121976
ccxxvii.	The Calf -	63 59 16	-1,01	63 59 15	
	Cross Fell -	57 48 24,5	-1,02	57 48 23,5	
	Helvellin Mountain -	. . .		58 12 21,5	
	Cross Fell from { The Calf - Helvellin Mountain				122505,3 129531,8
ccxxviii.	Cross Fell -	26 35 21,5	-0,44	26 35 21	
	The Calf -	86 13 39,25	-0,76	86 13 38,5	
	Shunnor Fell -	. . .		67 11 0,5	
	Shunnor Fell from { Cross Fell - The Calf -				132616,9 59486,9*

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Fect.
ccxxxix	Ingleborough Hill - The Calf - Shunnor Fell -	43 31 19 72 31 16 . . .	-0,31 -0,4	43 31 18,75 72 31 15,5 63 57 25,75	
	Shunnor Fell from { Ingleborough Hill The Calf -				82397 59487,9*
	Black Hambleton from Great Whernside 168740,1.feet.				
ccxxx.	Black Hambleton. Water Crag - Great Whernside -	32 56 51,75 62 22 46,5 . . .	-1,07 -1,17	32 56 50,75 62 22 45,25 84 40 24	
	Water Crag from { Black Hambleton - Great Whernside -				189621 103576,6
ccxxxix	Black Hambleton - Hambleton Down - Water Crag -	122 11 27,75 52 16 32 . . .	-1,95 +1,47	122 11 26 52 16 33,5 5 32 0,5	
	Hambleton Down from Water Crag -				202882,7
ccxxxix.	Black Hambleton - Water Crag - Brandon Down -	46 13 27,25 66 3 11,5 67 43 27,5	-1,68 -1,72 -1,75	46 13 25 66 3 9,5 67 43 25,5	
	Brandon Down from { Black Hambleton Water Crag -	180 0 6,25			187275,6 147957,9
ccxxxix.	Brandon Down - Water Crag - Collier Law -	57 0 24,25 25 0 11,75 97 59 21	-0,31 -0,38 -1,12	57 0 25 25 0 12 97 59 23	
	Collier Law from { Brandon Down - Water Crag -	179 59 57			63150,5 125314,1

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Fect.
ccxxxiv.	Water Crag - -	91 3 23,25	-2,81	91 3 21	
	Black Hambleton - -	33 8 18,75	-1,29	33 8 17,5	
	Collier Law - -	55 48 22,5	-1,37	55 48 21,5	
		180 0 4,5			
	Black Hambleton from Collier Law				229210,8
ccxxxv.	Water Crag - - -	52 19 53,5 "	-0,7.	52 19 52,5	
	Collier Law - - -	64 2 0	-0,99	64 1 59	
	Cross Fell - - -	63 38 9,5	-1	63 38 8,5	
		180 0 3			
	Cross Fell from { Water Crag - Collier Law -				125741,2 110708,2
ccxxxvi.	Water Crag - - -	93 12 26,75	-0,47	93 12 26,25	
	Cross Fell - - -	15 35 36	-0,26	15 35 35,75	
	Shunnor Fell - -	.		71 11 58	
	Shunnor Fell from { Water Crag Cross Fell -				35705,3 132620,7*
ccxxxvii.	Cross Fell - - -	99 59 22	-1,94	99 59 20	
	Water Crag - - -	40 43 16	-0,74	40 43 15,25	
	Helvellin Mountain	.		39 17 24,75	
	Helvellin Mountain from Water Crag				195556,3

The distance from Shunnor Fell to Great Whernside is found, by means of the included angle at Ingleborough Hill, viz.  $66^{\circ} 10' 48''$ , and the distances already given from that station to each of them, to be 91757,1 feet, and the same distance found by means of the included angle at Water Crag, viz.  $61^{\circ} 1' 28''$ , and their respective distances from that station is 91759,8 feet.

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
ccxxxviii	Black Comb - - - The Calf - - - Sca-Fell, Lower Top	$\begin{array}{ccc} 58 & 57 & 16,5 \\ 23 & 49 & 59,75 \\ . & . & . \end{array}$	$\begin{array}{c} -0,48 \\ -0,63 \end{array}$	$\begin{array}{ccc} 58 & 57 & 16 \\ 23 & 49 & 59 \\ 97 & 12 & 45 \end{array}$	
	Sca-Fell, Lower Top, from { Black Comb The Calf -				72747,1 154245,8
ccxxxix.	Black Comb - - - Dent Hill - - - Sca-Fell, Lower Top	$\begin{array}{ccc} 38 & 18 & 57 \\ 49 & 14 & 1,5 \\ . & . & . \end{array}$	$\begin{array}{c} -0,26 \\ -0,3 \end{array}$	$\begin{array}{ccc} 38 & 18 & 56,75 \\ 49 & 14 & 1,25 \\ 92 & 27 & 2 \end{array}$	
	Dent Hill from { Black Comb - - - Sca-Fell, Lower Top				95963,3 59551,2
ccxli.	Cross Fell - - - Crif-Fell - - - Helvellin Mountain	$\begin{array}{ccc} 49 & 49 & 57,75 \\ 29 & 52 & 19 \\ . & . & . \end{array}$	$\begin{array}{c} -0,87 \\ -1,25 \end{array}$	$\begin{array}{ccc} 49 & 49 & 57 \\ 29 & 52 & 17,75 \\ 100 & 17 & 45,25 \end{array}$	
	Crif-Fell from { Cross Fell - - - Helvellin Mountain				255886,1 198738,6
ccxli.	Cross Fell - - - The Calf - - - High Pike - - -	$\begin{array}{ccc} 87 & 59 & 10,5 \\ 45 & 37 & 1 \\ . & . & . \end{array}$	$\begin{array}{c} -0,59 \\ -0,68 \end{array}$	$\begin{array}{ccc} 87 & 59 & 10 \\ 45 & 37 & 0,25 \\ 46 & 23 & 49,75 \end{array}$	
	High Pike from { Cross Fell - - - The Calf - - -				120904,7 169069,5
ccxlii.	Cross Fell - - - High Pike - - - Helvellin Mountain	$\begin{array}{ccc} 30 & 10 & 43 \\ 82 & 11 & 30 \\ . & . & . \end{array}$	$\begin{array}{c} -0,3 \\ -0,79 \end{array}$	$\begin{array}{ccc} 30 & 10 & 42,75 \\ 82 & 11 & 29,29 \\ 67 & 37 & 48 \end{array}$	
	High Pike from { Cross Fell - - - Helvellin Mountain				120905,1 65724,6

## The Account of a

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
CCXLIII.	Cross Fell - -	64 8 15,5	-1,34	64 8 14,25	
	High Pike - - -	85 1 55,5	-2,56	85 1 53	
	Wisp Hill - - -	. . .		30 49 52,75	
Wisp Hill from { Cross Fell - High Pike -					235019,8 212278,4
CCXLIV	Cross Fell - -	44 29 1	-2,87	44 28 58	
	Crif-Fell - - -	61 49 36	-3,25	61 49 32,75	
	Wisp Hill - - -	73 41 30	-3,7	73 41 29,25	
		180 0 7			
Wisp Hill from { Cross Fell - Crif-Fell - -					235024,3 186814,9
CCXLV.	Crif Fell - - -	77 48 9,75	-4,51	77 48 5,25	
	High Pike - - -	59 20 15	+2,52	59 20 12,5	
	Wisp Hill - - -	. . .		42 51 42,25	
High Pike from { Crif-Fell - Wisp Hill - -					147733,5 212277,5
CCXLVI.	Crif-Fell - - -	26 36 11,25	+0,34	26 36 11,5	
	Cross Fell - - -	27 42 23,5	+0,38	27 42 24	
	Skiddaw - - -	. . .		125 41 24,5	
Skiddaw from { Crif-Fell - Cross Fell - -					146485,3* 141086,3
CCXLVII.	Crif-Fell - - -	10 37 35	-0,11	10 37 35	
	High Pike - - -	82 4 53,75	-0,19	82 4 53,5	
	Skiddaw - - -	. . .		87 17 31,5	
Skiddaw from { Crif-Fell - High Pike -					146488,5* 27273,1
Mean distance from Crif-Fell to Skiddaw 146486,9 feet.					

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Fect.
CCXLVIII.	Crif-Fell - - -	33 24 18,5	-0,75	33 24 17,75	
	Dent Hill - - -	63 34 19,25	-0,86	63 34 18,5	
	Skiddaw - - -	. . .		83 1 23,75	
	Dent Hill from { Crif-Fell - - Skiddaw - -				162371,1 90060,7
CCXLIX.	Crif-Fell - - -	38 11 48	-0,83	38 11 47,25	
	Scilly Bank - - -	74 48 14,5	-0,82	74 48 13,75	
	Skiddaw - - -	. . .		66 59 59	
	Scilly Bank from { Crif-Fell - - Skiddaw - -				139727,3 93863,6
CEL.	Dent Hill - - -	90 20 26		90 20 26	
	Scilly Bank - - -	73 38 6		73 38 6	
	Skiddaw - - -	. . .		16 1 28	
	Scilly Bank from { Dent Hill - - Skiddaw - -				25910,8 93861,6

The sides Dent Hill from Black Comb 95963,3 feet, and Dent Hill from Skiddaw 90060,7 feet, with  $106^{\circ} 12' 0''$  their included angle at Dent Hill, give 148802,7 feet for the distance between Black Comb and Skiddaw, on which the following triangle for finding the distance between Black Comb and Scilly Bank depends.

ECLI.	Black Comb - - -			39 1 48	
	Skiddaw - - -			54 47 23	
	Scilly Bank - - -			86 40 49	
	Black Comb from Scilly Bank				121027,7



## The Account of a

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					feet.
CCLII.	Black Comb - -	65° 58' 6"	-1,2	65° 58' 4,75	
	Dent Hill - -	89 8 10	-2,28	89 8 7,75	
	North Berule (Isle of Man) - -	. . .		24 53 47,5	
	North Berule from { Black Comb Dent Hill -				227925,6 208192,2
CCLIII.	Black Comb - -	62 28 25	-1,55	62 28 23,5	
	Scilly Bank - -	85 33 51	-2,62	85 33 48,25	
	North Berule - -	. . .		31 57 48,25	
	North Berule from { Black Comb Scilly Bank -				227937,6 202741,4
*CCLIV.	Black Comb - -	64 57 14*	-1,67	64 57 12,25	
	Scilly Bank - -	85 10 38	-2,79	85 10 35,25	
	Snea Fell - -	. . .		29 52 12,5	
	Snea Fell from { Black Comb Scilly Bank - -				242149,4 220157,1
CCLV.	Collier Law - -	95 1 11,25	-4,61	95 1 6,5	
	Cross Fell - -	62 47 32,5	-0,61	62 47 32	
	The Cheviot - -	. . .		22 11 21,5	
	The Cheviot from { Collier Law Cross Fell -				260702,2 292012,7

\* When the party were on Crif-Fell, Snea Fell in the Isle of Man was once observed, but the object was not, at that time, sufficiently distinct to admit of a very accurate observation, and no opportunity offered afterwards of verifying the one then made. By this observation, the angle between Helvellin Mountain and Snea Fell is  $76^{\circ} 37' 34''$ , which, with the data already given, makes the distance from Crif-Fell to Snea Fell 203380,3 feet, and from Black Comb to Snea Fell 242146,7 feet.

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation	Distances.
					Feet.
CCLVI.	Cross Fell - - -	39 15 48.75	-2.64	39 15 46	
	Wisp Hill - - -	87 14 9	-4.84	87 14 4	
	The Cheviot - - -	. . .		53 30 10	
	Wisp Hill from { Cross Fell - 235018,6 The Cheviot - 185023,9				
CCLVII.	Wisp Hill - - -	41 42 33.75	-2.03	41 42 31.75	
	Crif-Fell Hill - - -	44 6 39.75	-0.87	44 6 39	
	Queensberry Hill . . .	. . .		94 10 49.25	
	Queensberry Hill from { Wisp Hill - 130379 Crif-Fell Hill - 124628				
CCLVIII.	Wisp Hill - - -	50 36 16	-2.08	50 36 14	
	Sayrs Law - - -	55 50 18.25	-2.21	55 50 16	
	The Cheviot - - -	. . .		73 33 30	
	Sayrs Law from { Wisp Hill - 214463,4 The Cheviot - 172798,4				
CCLIX.	Wisp Hill - - -	39 42 52.5	-0.41	39 42 52	
	Sayrs Law - - -	30 1 39.5	-0.48	30 1 39	
	The Dunrigs - - -	. . .		110 15 29	
	The Dunrigs from { Wisp Hill - 114397,1 Sayrs Law - 146069,4				
CCLX.	Black Hambleton - - -	72 42 6	-0.27	72 42 5.75	
	Brandon Down - - -	15 36 50	-0.54	15 36 49.5	
	Botton Head - - -	. . .		11 41 47.5	
	Botton Head from { Black Hambleton - 50427,2 Brandon Down - 178882,3				

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances. Feet.
CCLXI.	Brandon Down - Wordeslow Hill - Botton Head -	77 58 43,75 81 28 33,75 .	-0,96 -0,01	77 58 42,75 81 28 32,75 20 32 44,5	
	Wordeslow Hill from {			Brandon Down - Botton Head -	63480,7* 176913,7
CCLXII.	Botton Head - Easington Heights - Wordeslow Hill -	65 37 33, 88 18 12,25 .	-0,74 -1,58	65 37 32,25 88 18 10,5 26 4 17,25	
	Easington Heights from {			Botton Head - Wordeslow Hill	77786,3 161215,8
CCLXIII.	Easington Heights - Burleigh Moor - Wordeslow Hill -	37 7 17 131 33 56 .	+0,84 -0,46	37 7 17,75 131 33 55,5 11 18 46,75	
	Burleigh Moor from {			Easington Heights Wordeslow Hill -	42268,7 130039,1
CCLXIV.	Wordeslow Hill - Burleigh Moor - Brandon Down -	96 14 3 24 44 28 59 1 31,5 180 0 2,5	-1,5 -0,45 -0,37	96 14 1,5 24 44 27,5 59 1 31	
	Brandon Down from {			Wordeslow Hill - Burleigh Moor -	63475,5* 150771
Mean distance from Wordeslow Hill to Brandon Down 63478,1 feet.					
CCLXV.	Wordeslow Hill - Brandon Down - Pontop Pike -	38 50 58 81 21 42,75 59 47 19,75 180 0 0,5	-0,2 -0,13 -0,16	38 50 57,75 81 21 42,75 59 47 19,5	
	Pontop Pike from {			Wordeslow Hill - Brandon Down -	72621,9 46076,5*

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Feet.
CCLXVI.	Collier Law - -	$\begin{array}{ccc} 0 & & 0 \\ 44 & 47 & 10 \end{array}$	$-0,14$	$\begin{array}{ccc} 0 & & 0 \\ 44 & 47 & 11 \end{array}$	56824,6 46078,5*
	Brandon Down - -	$\begin{array}{ccc} 60 & 18 & 51 \end{array}$	$-0,18$	$\begin{array}{ccc} 60 & 18 & 52 \end{array}$	
	Pontop Pike - -	$\begin{array}{ccc} 74 & 53 & 55,5 \end{array}$	$-0,23$	$\begin{array}{ccc} 74 & 53 & 57 \end{array}$	
		$\begin{array}{ccc} 179 & 59 & 56,5 \end{array}$			
	Pontop Pike from { Collier Law - Brandon Down				
CCLXVII.	Wordeslow Hill - -	$\begin{array}{ccc} 19 & 6 & 42,25 \end{array}$	$+0,42$	$\begin{array}{ccc} 19 & 6 & 40 \end{array}$	119613
	Brandon Down - -	$\begin{array}{ccc} 141 & 40 & 31,5 \end{array}$	$-1,35$	$\begin{array}{ccc} 141 & 40 & 30 \end{array}$	
	Collier Law - -	$\begin{array}{ccc} 19 & 12 & 51 \end{array}$	$+0,43$	$\begin{array}{ccc} 19 & 12 & 50 \end{array}$	
		$\begin{array}{ccc} 180 & 0 & 4,75 \end{array}$			
	Collier Law from Wordeslow Hill				
CCLXVIII.	Wordeslow Hill - -	$\begin{array}{ccc} 68 & 16 & 54 \end{array}$	$-1,72$	$\begin{array}{ccc} 68 & 16 & 52,75 \end{array}$	194372,3 186764,7*
	Collier Law - -	$\begin{array}{ccc} 75 & 12 & 28 \end{array}$	$-1,97$	$\begin{array}{ccc} 75 & 12 & 26 \end{array}$	
	Simonside Hill - -	$\begin{array}{ccc} . & . & . \end{array}$	.	$\begin{array}{ccc} 36 & 30 & 41,25 \end{array}$	
		$\begin{array}{ccc} . & . & . \end{array}$			
	Simonside Hill from { Wordeslow Hill Collier Law -				
CCLXIX.	Cross Fell - -	$\begin{array}{ccc} 49 & 36 & 25,5 \end{array}$	$-0,68$	$\begin{array}{ccc} 49 & 36 & 25 \end{array}$	238390,7 186765*
	Collier Law - -	$\begin{array}{ccc} 103 & 33 & 22,75 \end{array}$	$-2,93$	$\begin{array}{ccc} 103 & 33 & 20 \end{array}$	
	Simonside Hill - -	$\begin{array}{ccc} . & . & . \end{array}$		$\begin{array}{ccc} 20 & 50 & 15 \end{array}$	
		$\begin{array}{ccc} . & . & . \end{array}$			
	Simonside Hill from { Cross Fell - Collier Law -				
	Mean distance from Collier Law to Simonside Hill 186764.8 feet.				
CCLXX.	Collier Law - -	$\begin{array}{ccc} 14 & 28 & 51 \end{array}$	$-0,32$	$\begin{array}{ccc} 14 & 28 & 50,75 \end{array}$	169584* 48036,8
	Rufflaw - -	$\begin{array}{ccc} 103 & 32 & 30 \end{array}$	$-1,4$	$\begin{array}{ccc} 103 & 32 & 28,5 \end{array}$	
	Simonside Hill - -	$\begin{array}{ccc} . & . & . \end{array}$		$\begin{array}{ccc} 61 & 58 & 40,75 \end{array}$	
		$\begin{array}{ccc} . & . & . \end{array}$			
	Rufflaw from { Collier Law - Simonside Hill -				

No. of Triangles	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Fect.
CCLXXI.	Collier Law - - -	23 1 6	+0,1	23 1 6	
	Rufflaw - - -	124 36 49,75	-7,08	124 36 42,75	
	The Cheviot - - -	. . .		32 22 11,25	
	Rufflaw from { Collier Law - - - 169589*				123862,8
	The Cheviot - - -				
CCLXXII.	Collier Law - - -	35 9 21	+0,69	35 9 21,75	
	Rufflaw - - -	14 52 51,5	+0,17	14 52 51,75	
	Pontop Pike - - -	. . .		129 57 46,5	
	Pontop Pike from Rufflaw -				127402,4

By using  $60^{\circ} 43' 36''$ , the included angle at Collier Law and the distances from that station to Rufflaw and Wordeslow Hill, the distances between those stations is found to be 152413 feet.

CCLXXIII.	Rufflaw - - -	60 0 5,5	-1,22	60 0 5,25	
	Alnwick Moor - - -	40 34 54	-0,18	40 34 53,75	
	Simonside Hill - - -	. . .		79 25 1	
	Alnwick Moor from { Rufflaw - - - 72588,1*				63950,4
	Simonside Hill				
CCLXXIV.	Rufflaw - - -	38 55 42	+0,36	38 55 42,25	
	Alnwick Moor - - -	106 58 56	-0,55	106 58 55,5	
	The Cheviot - - -	. . .		32 5 22,25	
	Alnwick Moor from { Rufflaw - - - 72588,7*				81377,4
	The Cheviot				

No. of Triangles	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Fect.
CCLXXV.	Says Law - - Mordington Hill - The Cheviot - -	$\begin{array}{r} 44^{\circ} 34' 27,25 \\ 89 \quad 34 \quad 2,75 \\ . \quad . \quad . \end{array}$	$\begin{array}{r} -0,89 \\ -1,75 \end{array}$	$\begin{array}{r} 44^{\circ} 34' 26,25 \\ 89 \quad 34 \quad 1 \\ 45 \quad 51 \quad 32,75 \end{array}$	
	Mordington Hill from { Says Law - The Cheviot -				$\begin{array}{r} 124008,6 \\ 121278,4 \end{array}$
CCLXXVI.	Mordington Hill - Blackheddon - . - The Cheviot - . .	$\begin{array}{r} 32^{\circ} 43' 0,25 \\ 117 \quad 9 \quad 58,25 \\ . \quad . \quad . \end{array}$	$\begin{array}{r} -0,24 \\ -1,01 \\ . \end{array}$	$\begin{array}{r} 32^{\circ} 43' 0 \\ 117 \quad 9 \quad 57,25 \\ 30 \quad 7 \quad 2,75 \end{array}$	
	Blackheddon from { Mordington Hill The Cheviot -				$\begin{array}{r} 68399,7^* \\ 73676,6 \end{array}$
CCLXXVII.	Mordington Hill - Blackheddon - . - Says Law - -	$\begin{array}{r} 122^{\circ} 17' 3 \\ 37 \quad 54 \quad 29,25 \\ . \quad . \quad . \end{array}$	$\begin{array}{r} -1,91 \\ -0,42 \\ . \end{array}$	$\begin{array}{r} 122 \quad 17 \quad 1 \\ 37 \quad 54 \quad 28,75 \\ 19 \quad 48 \quad 30,25 \end{array}$	
	Blackheddon from { Mordington Hill Says Law -				$\begin{array}{r} 68398,3^* \\ 170637,4 \end{array}$
CCLXXVIII.	Blackheddon - - Lumsdane Hill - - Says Law - -	$\begin{array}{r} 33^{\circ} 9' 8,25 \\ 107 \quad 25 \quad 29,5 \\ . \quad . \quad . \end{array}$	$\begin{array}{r} -0,37 \\ -1,79 \end{array}$	$\begin{array}{r} 33 \quad 9 \quad 8 \\ 107 \quad 25 \quad 27,75 \\ 39 \quad 25 \quad 24,25 \end{array}$	
	Lumsdane Hill from { Blackheddon - Says Law -				$\begin{array}{r} 113574,1^* \\ 97803,5 \end{array}$
CCLXXIX.	Blackheddon - - Lumsdane Hill - - The Cheviot - -	$\begin{array}{r} 112^{\circ} 24' 37,25 \\ 25 \quad 40 \quad 44 \\ . \quad . \quad . \end{array}$	$\begin{array}{r} -1,2 \\ -0,11 \end{array}$	$\begin{array}{r} 112 \quad 24 \quad 36 \\ 25 \quad 40 \quad 44 \\ 41 \quad 54 \quad 40 \end{array}$	
	Lumsdane Hill from { Blackheddon - The Cheviot -				$\begin{array}{r} 113573^* \\ 157184,9 \end{array}$

The distance from Lumsdane Hill to Mordington Hill is discovered to be 45764,1 feet, by using  $19^{\circ} 36' 54''$  the included angle at Sayrs Law with their respective distances from that station.

No. of Triangles.	Names of Stations.	Observed Angles.	Diff.	Angles corrected for Calculation.	Distances.
					Fect.
CCLXXX	Sayrs Law - -	$96^{\circ} 56' 7''$	-1,98	$96^{\circ} 56' 5''$	
	Lumsdane Hill - -	$52^{\circ} 11' 55,5''$	-0,66	$52^{\circ} 11' 55''$	
	Largo Law - -	. . .		$30^{\circ} 52' 0''$	
	Largo Law from { Sayrs Law - Lumsdane Hill				150628,1 189240,1
CCLXXXI.	Sayrs Law - -	$114^{\circ} 29' 4,5''$	-3,2	$114^{\circ} 29' 1,25''$	
	Lumsdane Hill - -	$43^{\circ} 48' 42''$	+0,15	$43^{\circ} 48' 42,25''$	
	East Lomond Top -	. . .		$21^{\circ} 42' 16,5''$	
	East Lomond Top from { Sayrs Law - Lumsdane Hill				183084 240679

The sides Alnwick Moor to The Cheviot 81377,4 feet, and Alnwick Moor to Simonside Hill 63950,4 feet, together with  $66^{\circ} 24' 2''$  the included angle at Alnwick Moor gives 80901,8 feet for the distance from The Cheviot to Simonside Hill, and  $46^{\circ} 24' 56''$  for the angle at The Cheviot. The angle at Blackheddon between The Cheviot and Simonside Hill is  $34^{\circ} 20' 53''$ , and the distance from that station to The Cheviot is 74676,6 feet, these, with the distance just found, give 130234,2 feet for the distance between Blackheddon and Simonside Hill, and  $14^{\circ} 43' 58''$  for the angle at The Cheviot between those points; whence  $68^{\circ} 19' 2''$  is found to be the angle at The Cheviot between Alnwick Moor and Blackheddon, which with 81377,4 and 73676,6 feet their respective distances from The Cheviot, give 87293,3 feet for their distance from each other.

SECTION THIRD.

ART. I. *Secondary Triangles formed by the intersection of Church Steeples, Light-Houses, Signal Staves, and other remarkable Objects, from the principal Stations.*

Names of Stations and intersected Objects.	Angles for Calculation	Distances in Feet.	Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.
Royston from Orwell 43642.8 feet.			Royston - - -	0 56 35	37860
Royston - - -	16 56 27	155355	Orwell - - -	23 54 36	6423
Orwell - - -	156 40 20	114316	Orwell Steeple - -	. . .	
Ely Minster - -	. . .		Royston - - -	98 40 27	23644
Royston - - -	21 3 35	74857	Orwell - - -	26 20 27	52678
Orwell - - -	134 15 40	37560	Asbwell's Spire - -	. . .	
Great St. Mary's, Cambr.	. . .		Royston - - -	56 13 18	91156
Royston - - -	10 56 3	70300	Orwell - - -	96 20 52	78745
Orwell - - -	152 17 1	28671	Balsbam Steeple - -	. . .	
Colton Spire - -	. . .		Royston - - -	20 15 37	28393
Royston - - -	3 46 48	49738	Orwell - - -	30 1 59	19644
Orwell - - -	151 17 22	6826	Meldreth Steeple - -	. . .	
Great Eversden Steeple	. . .		Royston - - -	16 59 59	15230
Royston - - -	31 47 47	23674	Orwell - - -	8 42 21	29417
Orwell - - -	27 56 22	26624	Bassingbourn Steeple	. . .	
Melbourne Steeple -	. . .		Royston - - -	10 21 4	42358
Royston - - -	39 15 0	71394	Orwell - - -	75 27 31	7863
Orwell - - -	104 27 19	46648	Whimple Ruins - -	. . .	
Lord Osborne's House	. . .		Royston - - -	12 56 3	38322
Royston - - -	78 16 40	32930	Orwell - - -	93 44 0	10638
Orwell - - -	41 6 24	49042	Lord Hardwick's Pleasure House	. . .	
Headon Steeple - -	. . .		Royston - - -	34 5 36	116152
Royston - - -	85 25 41	29508	Orwell - - -	128 54 19	83666
Orwell - - -	35 27 54	50696	Mr. Humphrey's Windmill	. . .	
Chisball Steeple - -	. . .				



Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and intersected Objects.	Observed Angles.	Distances in Feet.
Royston - - -	33 58 28	114694	Orwell - - -	128 11 48	52727
Orwell - - -	128 46 0	82202	Balsham - - -	21 12 2	114584
Stowham Steeple - -	. . .		Aswell Spire - - -	. . .	
Royston - - -	110 49 0	20164	Royston from Balsham 93515,3 feet.		
Orwell - - -	20 21 9	54192	Royston - - -	116 10 1	35800
Peachy's Obelisk - -	. . .		Balsham - - -	10 22 53	113923
Royston - - -	110 24 4	20757	Hush Spire - - -	. . .	
Orwell - - -	20 55 33	54471	Maddingly from Balsham 61627,8 feet.		
Cupola with Vane and Pinnacle - - -	. . .		Maddingly - - -	46 49 28	32117
Orwell from Maddingly 29796,8 feet.			Bilham - - -	30 41 28	4031
Orwell - - -	21 36 30	37568	Maggots Mount - - -	. . .	
Maddingly - - -	110 20 55	14756	Maddingly - - -	52 57 57	35153
Great St. Mary's Steeple, Cambridge - - -	. . .		Balsham - - -	11 33 36	67229
Orwell - - -	33 0 55	28152	Cottonham Spire - - -	. . .	
Maddingly - - -	68 1 10	10541	Balsham from Newmarket 4954,2 feet.		
Granbester Steeple - -	. . .		Balsham - - -	61 29 52	85118
Orwell - - -	20 27 29	37526	Newmarket - - -	82 2 21	70179
Maddingly - - -	112 14 12	1410	Hadham Spire - - -	. . .	
Trinity College, Cambridge - - -	. . .		Balsham - - -	64 20 43	98708
Orwell - - -	21 44 30	38090	Newmarket - - -	86 38 35	80130
Maddingly - - -	111 35 25	15174	Sutton Steeple - - -	. . .	
Trinity Spire, Cambridge - - -	. . .		Balsham - - -	59 47 46	27103
Orwell - - -	38 23 25	30162	Newmarket - - -	84 43 36	41572
Maddingly - - -	72 37 13	19822	Bottisham Steeple - - -	. . .	
Trumpington Steeple - -	. . .		Balsham - - -	67 34 57	2366
Orwell - - -	3 35 2	28660	Newmarket - - -	29 43 3	41093
Maddingly - - -	56 20 8	2152	Great Wilbram Steeple - - -	. . .	
Coton Spire - - -	. . .		Newmarket from Brandon Hill 73037,7 feet.		
Orwell - - -	83 7 16	21794	Newmarket - - -	89 9 16	62766
Maddingly - - -	42 32 20	36109	Brandon Hill - - -	40 40 54	95278
Barksey Mill - - -	. . .		Stretton Spire - - -	. . .	
Orwell from Balsham 71225 feet.			Newmarket - - -	9 45 29	39733
Orwell - - -	101 42 52	4874	Brandon Hill - - -	10 57 31	35425
Balsham - - -	20 57 29	534	Mildenhall Steeple - - -	. . .	
Thaxfold Mill - - -	. . .		Newmarket - - -	108 41 56	25702
Orwell - - -	5 30 11	7531	Brandon Hill - - -	16 30 8	85708
Balsham - - -	118 41 1	3613	Burwell Spire - - -	. . .	
Balsam Steeple - - -	. . .				

Names of Stations and intersected Objects	Observed Angles.	Distances in Feet.	Names of Stations and intersected Objects	Observed Angles.	Distances in Feet.
Bow Brickhill from Kensworth 57668 feet.			Brogborough -	19 35 57	14079
Bow Brickhill -	60 32 27	139016	Trusler Hill -	06 11 53	1215
Kensworth -	95 3 7	121514	Aspley Wood Oak -	. . .	
Therfield Steeple -	. . .		Brogborough -	25 5 14	15337
Bow Brickhill -	59 23 51	136257	Trusler Hill -	82 12 42	6554
Kensworth -	95 50 18	118495	Spruce Fir -	. . .	
Ketshall Steeple -	. . .		Brogborough -	101 51 23	16360
Bow Brickhill -	57 5 5	134708	Trusler Hill -	41 50 44	21300
Kensworth -	97 49 44	114145	Wulcan Steeple -	. . .	
Sandon Steeple -	. . .		Trusler Hill -	103 25 45	929
Horsemer Hill from Brogborough 17059 feet			Brogborough -	27 17 31	161
Horsemer Hill -	8 36 29	10270	Trusler Hill -	30 51 11	1146
Brogborough -	11 17 4	7855	Brogborough -	34 3 55	1938
Culston Steeple -	. . .		Landon Hill -	. . .	
Horsemer Hill -	9 7 38	12562	Trusler Hill -	96 9 3	13634
Brogborough -	20 3 57	75878	Brogborough -	39 59 5	21025
Murston Mortyne Steeple -	. . .		Job's Hill -	. . .	
Hill Farm from Brogborough 2627 feet			Trusler Hill from Bow Brickhill 20137 feet.		
Hill Farm -	149 33 15	19568	Trusler Hill -	14 34 53	21560
Brogborough -	12 55 15	41926	Bow Brickhill -	92 42 3	5104
Woburn Abbey -	. . .		Little Brickhill -	. . .	
Hill Farm from Bow Brickhill 16178 feet			Trusler Hill -	13 30 14	1932
Hill Farm -	130 28 38	8088	Bow Brickhill -	73 25 59	4716
Bow Brickhill -	16 1 12	22244	Little Brickhill Pest House -	. . .	
Milton Bryant Steeple -	. . .		Arbury Hill from Helkinton 67529.4 feet.		
Trusler Hill from Lillycroft 50673.6 feet.			Arbury Hill -	27 40 5	5903
Trusler Hill -	31 26 27	21007	Helkinton -	92 59 15	3223
Lillycroft -	12 36 29	35402	Lutterworth Steeple -	. . .	
Tudington Steeple -	. . .		Arbury Hill -	14 32 27	17827
Trusler Hill from Brogborough 14702.7 feet.			Helkinton -	5 2 10	50472
Brogborough -	36 5 31	28117	Dunentry Spire -	. . .	
Trusler Hill -	115 49 45	18402	Arbury Hill -	6 17 1	5053
Shire Ash Tree -	. . .		Helkinton -	12 50 25	10706
Brogborough -	54 48 35	10117	West Haddon Steeple -	. . .	
Trusler Hill -	14 22 17	11172	Arbury Hill -	4 15 33	53531
Aspley Steeple -	. . .		Helkinton -	15 1 33	11683
			West Haddon Steeple -	. . .	

Names of Stations and inter- sected Objects.	Observed Angles.	Distances in Feet.	Names of Stations and inter- sected Objects.	Observed Angles.	Distances in Feet.
Arbury Hill - -	16 1 19	63819	Helkinton - -	88 17 31	21845
Helkinton - -	70 38 24	18670	Naseby - -	48 11 16	29295
Guitesborough Spire -	. . .		North Kilworth Spire	. . .	
Arbury Hill - -	51 42 50	44561	Helkinton - -	32 37 40	24016
Helkinton - -	41 13 29	53075	Naseby - -	90 11 34	12948
Dunchurch Steeple	. . .		Sibertoft Steeple -	. . .	
Arbury Hill - -	26 50 36	85985	Helkinton - -	63 39 5	11352
Helkinton - -	103 19 0	39899	Naseby - -	33 53 24	18243
Misterton Steeple -	. . .		Welford Steeple -	. . .	
Arbury Hill - -	29 47 6	181893	Helkinton from Tilton 104228.1 feet.		
Helkinton - -	131 59 37	127707	Helkinton - -	50 5 16	132346
Mount Sorrel Windmill	. . .		Tilton - -	79 14 58	103365
Arbury Hill - -	9 12 44	80665	Bardon Gazebo -	. . .	
Helkinton - -	131 54 20	17223	Cropwell Bishop to Stathern 39454 feet		
Naseby Steeple -	. . .		Cropwell Bishop -	119 53 47	97620
Arbury Hill from Burrow Hill 19028.4 feet.			Stathern - -	44 2 14	122054
Burrow Hill - -	33 12 5	29610	Bardon Gazebo -	. . .	
Arbury Hill - -	109 31 7	14202	Tilton from Stathern 84107.6 feet.		
Sir Geo. Shuckburgh's Ob- servatory -	. . .		Tilton - -	6 31 51	63918
Burrow Hill - -	73 10 36	21302	Stathern - -	19 26 4	21849
Arbury Hill - -	57 45 20	24109	Waltbam Spire -	. . .	
Branstons Spire -	. . .		Tilton - -	99 46 56	7943
Burrow Hill - -	8 38 50	5513	Stathern - -	5 14 1	85813
Arbury Hill - -	3 29 37	13634	Tilton Spire -	. . .	
Newnham Windmill -	. . .		Tilton - -	41 16 21	19787
Burrow Hill - -	32 32 51	29719	Stathern - -	10 40 35	70456
Arbury Hill - -	110 38 32	17085	Cold Overton Steeple	. . .	
Shuckburgh Steeple -	. . .		Bardon Hill from Stathern 122298.7 feet.		
Burrow Hill - -	150 16 27	56311	Bardon Hill - -	36 49 30	94899
Arbury Hill - -	22 20 41	73444	Stathern - -	50 50 3	73363
Cold Ashby Steeple -	. . .		Nottingham Steeple -	. . .	
Helkinton from Naseby 20182 feet.			Bardon Hill - -	88 52 51	37761
Helkinton - -	64 7 26	24618	Stathern - -	17 15 13	127288
Naseby - -	62 55 16	24077	Bardon on the Hill Steeple		
Husband Bosworth Steeple	. . .		Stathern from Holland Hill 83722.1 feet.		
Helkinton - -	103 0 43	19681	Stathern - -	64 0 19	20178
Naseby - -	37 55 19	31202	Holland Hill - -	18 2 21	75983
South Kilworth Steeple	. . .		Botleyford Spire -	. . .	

Names of Stations and intersected Objects.	Observed Angles.	Distance in Feet.	Names of Stations and intersected Objects.	Observed Angles.	Distances in Feet.
Stathern - - -	64 24 35	13935	Stathern - - -	20 1 9	104670
Holland Hill - -	9 11 15	78713	Bottesford - - -	152 53 25	78631
Redmule Spire - -	. . .		Wellington Steeple -	. . .	
Stathern - - -	5 22 9	37747	Stathern - - -	7 5 46	45040
Holland Hill - -	4 22 39	46276	Bottesford - - -	161 11 51	17263
Bingham Spire - -	. . .		Long Bennington Steeple	. . .	
Stathern - - -	25 31 53	16331	Stathern - - -	5 0 42	25249
Holland Hill - -	5 49 33	69344	Bottesford - - -	169 30 40	54075
Lungar Steeple - -	. . .		Doddington Spire -	. . .	
Stathern - - -	147 44 26	21843	Stathern - - -	8 44 55	27538
Holland Hill - -	6 30 30	102856	Bottesford - - -	74 49 54	4340
Waltham Spire - -	. . .		Foston Spire - - -	. . .	
Stathern - - -	16 36 44	9878	Stathern - - -	135 22 38	37105
Holland Hill - -	2 10 41	74310	Bottesford - - -	25 32 41	60232
Plungar Steeple -	. . .		Over Broughton Steeple	. . .	
Stathern - - -	12 11 29	19125	Stathern - - -	138 40 9	33846
Holland Hill - -	3 33 14	65754	Bottesford - - -	22 35 9	58267
Granby Steeple - -	. . .		Netter Broughton Steeple	. . .	
Stathern - - -	89 18 48	75538	South End of proposed Base from Cropwell Bishop 28541 feet.		
Holland Hill - -	12 8 31	112580	South End of Base -	167 48 4	21538
Caythorpe Spire -	. . .		Cropwell Bishop -	5 14 36	49801
Stathern - - -	80 56 26	114129	Belvoir Castle - -	. . .	
Holland Hill - -	59 47 27	130482	Birdon Hill from Tilton 103683.2 feet.		
Celeby Spire - -	. . .		Birdon Hill - - -	54 14 42	33789
Stathern - - -	86 58 48	85874	Tilton - - -	18 5 27	88303
Holland Hill - -	47 16 35	116731	Loughborough Steeple	. . .	
Leadenham Spire -	. . .		Bardon Hill - - -	58 19 22	19104
Stathern - - -	79 8 26	118360	Loughborough - -	34 23 10	28787
Holland Hill - -	62 8 51	131471	Belton Spire - - -	. . .	
Harmstone Steeple	. . .		Bardon Hill - - -	1 21 21	36015
Stathern - - -	56 51 15	72726	Loughborough - -	158 58 8	2375
Holland Hill - -	48 25 28	64942	Stanford Hall - -	. . .	
Newark Spire - -	. . .		Cropwell Bishop from Bottesford 49999.4 feet.		
Stathern from Bottesford 28352.8 feet.			Cropwell Bishop -	17 32 7	35857
Stathern - - -	131 17 42	4298	Bottesford - - -	34 21 5	19146
Bottesford - - -	5 54 41	31356	Barkston Spire - -	. . .	
Stathern Steeple -	. . .		Cropwell Bishop -	1 24 25	47957
Stathern - - -	18 14 52	111617	Bottesford - - -	29 48 38	2369
Bottesford - - -	155 46 4	85154	Bottesford Spire -	. . .	
Boothby Steeple -	. . .				

Names of Stations and intersected Objects.	Observed Angles.	Distances in Feet.	Names of Stations and intersected Objects.	Observed Angles.	Distances in Feet.
Cropwell Bishop -	14 9 25	30344	Weaver Hill from Orpit Heights 71095.7 feet.		
Bottesford -	19 50 4	21873	Weaver Hill -	34 54 43	90525
Whetton Spire -	. . .		Orpit Heights -	93 27 58	51904
Cropwell Bishop -	15 14 13	42306	Derby Steeple -	. . .	
Bottesford -	50 27 37	14417	Bar Beacon from Weaver Hill 161601 feet.		
Redmire Spire -	. . .		Bar Beacon -	19 36 57	14758
Cropwell Bishop -	36 14 4	76855	Weaver Hill -	7 10 13	120382
Bottesford -	104 47 22	46985	Litchfield Spire -	. . .	
Newark Spire -	. . .		Bar Beacon from Castle Ring 51699.9 feet.		
Cropwell Bishop -	22 50 22	49783	Bar Beacon -	97 51 41	55140
Bottesford -	77 58 11	49757	Castle Ring -	21 17 41	60521
Belvoir Castle -	. . .		Wednesbury Steeple -	. . .	
Cropwell Bishop -	38 41 5	32829	Bar Beacon -	79 56 10	48345
Bottesford -	40 5 41	31860	Castle Ring -	47 44 21	64318
Kilvington Steeple -	. . .		Wolverhampton Spire -	. . .	
Cropwell Bishop from Holland Hill 52077.2 feet.			Brown Clee Hill from Ashley Heath, 168600 feet.		
Cropwell Bishop -	108 29 11	93328	Brown Clee Hill -	39 28 38	91282
Holland Hill -	47 15 35	120240	Ashley Heath -	30 35 50	114017
Gateway near Grantbam -	. . .		St. Chad's Steeple, Shrewsbury -	. . .	
Cropwell Bishop from Stathern 39452.5 feet.			Ashley Heath from Cyn y Brain 180351.1 feet.		
Cropwell Bishop -	16 56 8	35855	Ashley Heath -	56 49 47	111013
Stathern -	63 11 16	11647	Cyn y Brain -	38 58 17	151739
Barkstone Spire -	. . .		St. Chad's Steeple, Shrewsbury -	. . .	
Holland Hill from Sutton Ashfield 38375.2 feet.			Long Mountain from Cyn y Brain 114778.5 feet.		
Holland Hill -	36 53 11	83748	Long Mountain -	12 10 45	81670
Sutton Ashfield -	119 38 42	57838	Cyn y Brain -	14 51 28	67193
Kritch Spire -	. . .		Pile of Stones on Cynre Moelfre. -	. . .	
Holland Hill -	35 29 38	85074	Stow to the Long Mountain 104104.3 feet.		
Sutton Ashfield -	122 1 14	58259	Stow -	42 20 41	64010
Hunt's Gazebo -	. . .		Long Mountain -	37 12 17	71306
Sutton Ashfield from Orpit Heights 73826.6 feet.			Pole -	. . .	
Sutton Ashfield -	37 42 33	11113	Stow from Llandinam 98832.9 feet.		
Orpit Heights -	6 10 2	65150	Stow -	73 9 33	72940
Sutton Spire -	. . .		Llandinam -	41 56 20	104457
Sutton Ashfield -	14 23 18	11906	Mount near Montgomery -	. . .	
Orpit Heights -	2 43 9	62364			
Arby Spire -	. . .				

Names of Stations and intersected Objects.	Observed Angles.	Distances in Feet.	Names of Stations and intersected Objects.	Observed Angles.	Distances in Feet.
Stow - - -	160 0 16	90591	Malvern Station -	40 22 0	93420
Llandinam - -	9 33 30	186560	May Hill -	79 37 31	61512
<i>Titterstone Clee Hill, highest point</i> - -	. . .		<i>Churchdown Steeple</i> -	. . .	
Stow - - -	4 55 21	90701	Malvern Station -	64 33 54	85188
Llandinam - -	42 35 28	11500.	May Hill -	59 18 19	89465
<i>Flagstaff North of Llandinam Mountain</i> -	. . .		<i>Cleeve Steeple</i> -	. . .	
Talsarn from New Inn Hill 89121 feet.			Malvern Station -	82 33 18	74657
Talsarn - - -	6 48 59	74023	May Hill -	45 33 54	103674
New Inn Hill -	29 21 23	17921	<i>Beckford Steeple</i> -	. . .	
<i>Barrow near New Inn Hill</i> -	. . .		Malvern Station -	60 19 0	95902
Talsarn - - -	28 44 44	105533	May Hill -	67 21 5	90279
New Inn Hill -	93 50 20	50867	<i>Prestbury Steeple</i> -	. . .	
<i>Barrow on a Hill near Newcastle</i> -	. . .		Malvern Station -	60 33 56	57135
Talsarn from Tregarron Down 64953 feet.			May Hill -	43 10 17	73747
Talsarn - - -	12 58 41	56395	<i>Tewkesbury Steeple</i> -	. . .	
Tregarron Down -	53 20 30	15928	Malvern Station -	30 9 58	89133
<i>Karn of Stones near Llan-dewy</i> - -	. . .		May Hill -	83 23 8	45090
Talsarn from Aberystwith 78591.5 feet.			<i>Gloster Cathedral</i> -	. . .	
Talsarn - - -	19 29 10	93991	Malvern Station -	78 17 57	56516
Aberystwith - -	107 44 53	32921	May Hill -	33 0 57	89858
<i>Karn of Stones on the right of Plynlimmon</i> -	. . .		<i>Brecon Spire</i> -	. . .	
Cleeve from Malvern Station, 100909.6 feet.			Malvern Station -	19 53 10	30694
Cleeve - - -	61 27 18	57623	May Hill -	11 3 51	54403
Malvern Station -	34 36 2	89140	<i>Leibury Steeple</i> -	. . .	
<i>Gloster Cathedral</i> -	. . .		Malvern Station -	108 43 26	58750
Cleeve - - -	67 42 27	41710	May Hill -	23 40 22	115113
Malvern Station -	24 23 50	93431	<i>Persbore Steeple</i> -	. . .	
<i>Churchdown Steeple</i> -	. . .		Trelleg Beacon from Mynydd Mane 86392.7 feet.		
Malvern Station from May Hill 82255.5 feet			Trelleg Beacon -	22 7 18	3907
Malvern Station -	55 14 39	94887	Mynydd Mane -	1 1 6	82786
May Hill -	70 8 16	82889	<i>Trelleg Spire</i> -	. . .	
<i>Cheltenham Spire</i> -	. . .		Trelleg Beacon -	114 47 10	22725
			Mynydd Mane -	12 8 20	98113
			<i>Mr. Hardwick's Folly</i> -	. . .	
			Trelleg Beacon -	88 47 11	57151
			Mynydd Mane -	33 51 10	102571
			<i>A white Steeple</i> -	. . .	

Names of Stations and inter- sected Objects.	Observed Angles.	Distances in Feet.	Names of Stations and inter- sected Objects.	Observed Angles.	Distances in Feet.
Trelleg Beacon -	105 12 52	138485	Ogmoor Down -	166 50 3	42418
Mynydd Mane -	47 26 1	181443	Cefn Bryn -	3 15 1	170405
Lansdown Monument	.	.	Clump of Trees on Stalling Down -	.	.
Garth Hill from Mynydd Mane 69594.5 feet.					
Garth Hill -	50 40 55	142388	Margam Down from Llangeinor 36317.3 feet.		
Mynydd Mane -	100 36 19	112071	Margam Down -	4 20 4	29194
Pleasure House -	.	.	Llangeinor -	17 1 24	7537
	.	.	Blaengarrw Barrow	.	.
Garth Hill -	106 12 31	58078	Margam Down from Cefn Bryn 98765.8 feet.		
Mynydd Mane -	33 1 19	102337	Margam Down -	52 18 40	19589
Barrow on Carn Vawr	.	.	Cefn Bryn -	10 7 37	88163
	.	.	Voul Vawr Barrow -	.	.
Garth Hill -	9 19 10	55019	Margam Down -	34 1 5	264709
Mynydd Mane -	30 12 38	17707	Cefn Bryn -	129 10 3	191013
Twynbarlwm Mountain	.	.	East Extremity of Lundy Island -	.	.
Garth Hill from Ogmoor Down 75847.9 feet.					
Garth Hill -	19 45 41	18708	Margam Down -	30 46 14	261658
Ogmoor Down -	6 11 54	58584	Cefn Bryn -	133 16 46	183875
Llantrissant Steeple -	.	.	West Extremity of Lundy Island -	.	.
	.	.		.	.
Garth Hill -	20 25 28	19812	Margam Down -	33 50 36	267043
Ogmoor Down -	6 52 56	57697	Cefn Bryn -	129 35 57	193015
Llantrissant Windmill	.	.	Building on Lundy Island	.	.
Mynydd Mane from Llangeinor Mountain 114330.3 feet.					
Mynydd Mane -	48 48 33	112662	Margam Down -	19 1 45	50741
Llangeinor -	64 40 2	93800	Cefn Bryn -	18 2 22	53424
Beacons of Brecknock, highest Point -	.	.	Windmill on Kilvey Hill	.	.
	.	.		.	.
Mynydd Mane -	114 11 39	90484	Cefn Bryn from Marros Beacon 120551 feet.		
Llangeinor -	28 35 50	172442	Cefn Bryn -	23 36 46	49782
Sugar Loaf Mountain, or Pen y Voel -	.	.	Marros Beacon -	14 23 30	77012
	.	.	Penbree Steeple -	.	.
Mynydd Mane -	4 24 13	102336	Cefn Bryn -	1 0 53	143146
Llangeinor -	32 34 45	14593	Marros Beacon -	173 35 32	22714
Carn Vawr -	.	.	Llandowry Steeple -	.	.
	.	.		.	.
Ogmoor Down from Cefn Bryn 128827.8 feet.					
Ogmoor Down -	155 48 20	30343	Cefn Bryn -	3 8 26	131914
Cefn Bryn -	4 32 36	156999	Marros Beacon -	147 5 7	13300
Penline Castle -	.	.	Crunwell Steeple -	.	.
	.	.		.	.

Names of Stations and intersected Objects.	Observed Angles.	Distance in Feet.	Names of Stations and intersected Objects.	Observed Angles.	Distances in Feet.
Cefn Bryn from Lannon 62492.6 feet.			Marros Beacon -	85 47 47	95504
Cefn Bryn -	72 30 24	131352	Precelly Top -	51 3 39	122454
Lannon -	79 35 34	127372	Warren Spire -	. . .	. . .
Tenby Spire -	. . .	. . .	Marros Beacon -	88 47 37	83793
Cefn Bryn -	56 26 30	121175	Precelly Top -	45 32 39	117366
Lannon -	92 32 48	101078	St. Petrook's Steeple -	. . .	. . .
Marros Steeple -	. . .	. . .	Precelly Top from Plumstone Down 66753.5 ft.		
Marros Beacon from Lannon 102163 feet.			Precelly Top -	56 44 41	34087
Marros Beacon -	3 31 52	67188	Plumstone Down -	30 40 18	55879
Lannon -	6 43 21	35346	Dinas Rock -	. . .	. . .
Kidwelly Spire -	. . .	. . .	Precelly Top -	25 4 28	69227
Marros Beacon -	132 28 56	33723	Plumstone Down -	82 8 22	27616
Lannon -	11 15 29	127389	St. Thomas's Church Tower, Haverfordwest -	. . .	. . .
Tenby Spire -	. . .	. . .	Precelly Top -	24 0 47	68831
Marros Beacon -	48 22 39	89015	Plumstone Down -	82 6 49	28278
Lannon -	57 6 22	79247	Haverfordwest Spire -	. . .	. . .
West Point of Gower -	. . .	. . .	Precelly Top -	43 26 53	115709
Marros Beacon -	116 38 39	14342	Plumstone Down -	102 13 55	81421
Lannon -	17 59 25	128322	Sir H. Owen's Summer Ho	. . .	. . .
Wool House on Caldy Island -	. . .	. . .	Precelly Top -	27 22 45	66281
Marros Beacon -	62 21 57	3195	Plumstone Down -	76 52 8	28094
Lannon -	1 41 42	101081	Prandergest Steeple -	. . .	. . .
Marros Steeple -	. . .	. . .	Precelly Top -	44 29 58	69759
Marros Beacon -	22 4 4	120364	Plumstone Down -	70 49 49	51764
Lannon -	101 43 19	46184	Highest Point of Pencar Rock -	. . .	. . .
Windmill near Penclatb -	. . .	. . .	Precelly Top -	1 43 34	77314
Ogmoor Down from Margam Down 49328.2 ft			Plumstone Down -	167 31 25	10780
Ogmoor Down -	17 4 52	23063	Roach Castle -	. . .	. . .
Margam Down -	13 56 41	28111	Precelly Top -	42 57 29	63198
Windmill near Lieut. Gen. Huddleston's House -	. . .	. . .	Plumstone Down -	64 32 36	47698
Ogmoor Down -	26 41 6	19938	Lord Milford's Summer House -	. . .	. . .
Margam Down -	15 51 39	32761	Precelly Top -	41 4 36	122432
Windmill near the last -	. . .	. . .	Plumstone Down -	107 36 47	84403
Marros Beacon from Precelly Top 83962.5 feet.			Warren Spire -	. . .	. . .
Marros Beacon -	71 52 39	131548	Precelly Top -	46 35 33	117348
Precelly Top -	71 0 6	132225	Plumstone Down -	99 15 4	86375
St. Ann's Lighthouse -	. . .	. . .	St. Petrook's Steeple -	. . .	. . .



Names of Stations and inter- sected Objects.	Observed Angles.	Distances in Feet.	Names of Stations and inter- sected Objects.	Observed Angles.	Distances in Feet.
Precelly Top from Lannon 157603 feet.			Plumstone Down -	45 16 23	151963
Precelly Top - - -	47 48 20	37785	St. Ann's Hill - "	109 3 39	114227
Lannon - - -	11 57 14	135155	Small's Lighthouse -	.	.
Brenin Vawr - - -	120 14 26	.	Plumstone Down -	86 36 16	50209
New Inn Hill to Lannon 84401,8 feet.			St. Ann's Hill -	36 56 16	83403
New Inn Hill - - -	101 4 23	90602	Ponbury Rock -	.	.
Lannon - - -	41 8 3	135165	Plumstone Down -	64 6 47	69156
Brenin Vawr - - -	.	.	St. Ann's Hill -	57 37 35	73666
St. Ann's Hill from Precelly Mountain 128173,9 feet.			Highest Point of Ramsey Island -	.	.
St. Ann's Hill - - -	158 8 26	4318	Plumstone Down -	143 54 24	41984
Precelly Top - - -	0 41 49	132192	St. Ann's Hill -	13 25 55	106475
St. Ann's Lighthouse -	.	.	Puucbeston Steeple -	.	.
St. Ann's Hill - - -	24 43 45	36892	Plumstone Down -	102 47 59	36497
Precelly Top - - -	9 15 34	95914	St. Ann's Hill -	24 36 12	85483
Steinton Steeple -	.	.	Ruins of a Windmill near St. David's -	.	.
St. Ann's Hill - - -	66 10 58	56552	Plumstone Down -	45 6 48	78248
Precelly Top - - -	26 9 29	117356	St. Ann's Hill -	75 25 24	57283
St. Petrook's Steeple -	.	.	St. Daniel's Spire -	.	.
St. Ann's Hill - - -	16 20 44	44552	St. Ann's Hill from Highgate Mountain 53271,6 feet.		
Precelly Top - - -	8 21 1	86337	St. Ann's Hill -	10 10 30	50155
Johnstone Steeple -	.	.	Highgate Mountain -	66 12 43	9683
St. Ann's Hill - - -	72 31 42	45255	St. Twinell's Steeple -	.	.
Precelly Top - - -	20 38 32	122448	St. Ann's Hill - - -	21 13 27	34631
Warren Spire -	.	.	Highgate Mountain -	30 50 57	24449
Plumstone Down from St. Ann's Hill 69637 ft.			Summer House at Milford -	.	.
Plumstone Down - - -	37 46 31	81425	St. Ann's Hill - - -	34 13 19	36887
St. Ann's Hill - - -	83 57 37	50156	Highgate Mountain -	42 20 5	30804
Sir Hugh Owen's Summer House -	.	.	Steinton Steeple -	.	.
Plumstone Down - - -	27 31 7	10786	St. Ann's Hill - - -	42 36 30	44556
St. Ann's Hill - - -	4 44 32	60278	Highgate Mountain -	55 49 36	36458
Rouch Castle - - -	.	.	Johnstone Steeple -	.	.
Plumstone Down - - -	36 12 45	84879	St. Ann's Hill - - -	3 5 16	57276
St. Ann's Hill - - -	18 40 56	50158	Highgate Mountain -	141 48 17	4989
St. Ann's Hill - - -	.	.	St. Daniel's Spire -	.	.
St. Twinell's Steeple -	.	.	St. Ann's Hill - - -	24 35 18	32280
Plumstone Down - - -	39 11 31	110896	Highgate Mountain -	29 18 51	27432
St. Ann's Hill - - -	103 6 10	71951	Milford Steeple -	.	.
Highest Point of Gresbolm Island -	.	.			

Names of Stations and intersected Objects.	Observed Angles.	Distances in Feet.	Names of Stations and intersected Objects.	Observed Angles.	Distances in Feet.
St. Ann's Hill -	26 9 32	30872	Newton Down from Highgate Mountain		27439 feet.
Highgate Mountain -	28 1 59	28959			
Milford Market House					
St. Ann's Hill -	77 30 44	73215	Newton Down -	60 6 51	38493
Highgate Mountain -	62 21 22	80694	Highgate Mountain -	76 6 1	34381
Plumstone Rock -			Carew Beacon -		
St. Ann's Hill -	29 52 12	26868	Newton Down -	79 6 55	67873
Highgate Mountain -	24 3 31	32824	Highgate Mountain -	77 37 34	68237
Hubberstone Steeple -			Carew Windmill -		
St. Ann's Hill -	136 8 1	73666	Rhiw Mountain from Moel Rhyddlad		200017;7 feet.
Highgate Mountain -	25 38 5	117996	Rhiw Mountain -	63 24 51	26991
Highest Point of Ramsey Island -			Moel Rhyddlad -	7 19 7	189482
St. Ann's Hill -	22 23 25	81773	Old Windmill on Mynydd Mynithod -		
Highgate Mountain -	35 25 28	119130	Rhiw Mountain -	34 20 22	67441
Llyddy Rock -			Moel Rhyddlad -	14 45 59	149260
Plumstone Down from Highgate Mountain			Rivel Mountain, highest Point -		
		78797.4 feet.			
Plumstone Down -	91 6	32045	Llwydiart Mountain from Llanellian Mountain		in Anglesea 48180.5 feet.
Highgate Mountain -	21 58	85637	Llwydiart Mountain -	129 8 4	53636
Amblesstone Steeple -			Llanellian Mountain -	26 53 9	91984
Plumstone Down -	83 3 6	51401	Barrow on Penmaen Mawr		
Highgate Mountain -	35 6 27	88719	Llwydiart Mountain -	17 57 38	31449
Mole Steeple -			Llanellian Mountain -	27 58	20679
Plumstone Down -	102 25 19	41984	Bodafon Fire Beacon -		
Highgate Mountain -	25 1 29	96928	Llwydiart Mountain -	102 42 41	12620
Puncheston Steeple -			Llanellian Mountain -	13 34 56	52424
Precelly Top from Highgate Mountain		110560.7 feet.	Windmill near Llandonna		
Precelly Top -	5 37 1	12896	Llwydiart Mountain -	38 41 13	41431
Highgate Mountain -	0 44 24	97735	Llanellian Mountain -	58 32 52	30358
Maenclochog Steeple -			Llanerchmedd Windmill		
Marros Beacon from Newton Down		71196.8 feet.	Llwydiart Mountain -	63 23 35	18719
Marros Beacon -	18 17 24	54605	Llanellian Mountain -	22 48 35	43173
Newton Down -	41 31 43	25847	Windmill near Llanbedr-goch -		
Carew Steeple -			Llwydiart Mountain -	45 8 6	36608
Marros Beacon -	69 25 4	310	Llanellian Mountain -	49 14 32	34249
Newton Down -	2 22 27	701	Gadana Church		
Marros Steeple					

Names of Stations and intersected Objects.	Observed Angles.	Distance in Feet.	Names of Stations and intersected Objects.	Observed Angles.	Distance in Feet.
Llwydiart Mountain -	8 52 36	39037	Llanellian Mountain in Anglesea from Moel Rhyddlad 55199, 1 feet.		
Llanellian Mountain -	35 14 33	10680			
Highest Rock on Ynys Galdarn -	. . .		Llanellian Mountain -	64 41 20	196118
Llwydiart Mountain -	12 50 37	27749	Moel Rhyddlad -	99 10 44	179590
Llanellian Mountain -	16 16 37	22008	Pile near Edern -	. . .	
Large Stone on Ynys traeth Bychan -	. . .		Llanellian Mountain -	138 6 14	91276
Llwydiart Mountain -	144 43 53	110579	Moel Rhyddlad -	26 24 45	138075
Llanellian Mountain -	24 45 21	152475	Barrow on Penmachyn Moor -	. . .	
Belvidere near Plasnewydd -	. . .		Llanellian Mountain -	83 15 11	20679
Llwydiart Mountain -	69 24 31	91662	Moel Rhyddlad -	21 15 49	56625
Llanellian Mountain -	79 28 28	87275	Bodafen Fire Beacon -	. . .	
Rock on the Summit of a Hill near Rboscollyn -	. . .		Llanellian Mountain -	67 20 25	68365
Llwydiart Mountain from Moel Rhyddlad 85401, 1 feet.			Moel Rhyddlad -	65 25 2	69376
Llwydiart Mountain -	32 21 36	91663	Windmill near Tiesdraeth -	. . .	
Moel Rhyddlad -	80 46 8	49705	Llanellian Mountain -	88 24 44	43170
Rock on the Summit of a Hill near Rboscollyn -	. . .		Moel Rhyddlad -	38 37 42	69127
Llwydiart Mountain -	153 18 25	65109	Windmill near Llanbedrog -	. . .	
Moel Rhyddlad -	11 30 52	146520	Llanellian Mountain -	11 48 5	68026
Barrow on Carnedd David -	. . .		Moel Rhyddlad -	121 18 19	20339
Llwydiart Mountain -	87 52 31	125451	Skerry Lighthouse -	. . .	
Moel Rhyddlad -	57 7 59	149267	Llanellian Mountain -	121 7 53	112705
River Mountain highest Point -	. . .		Moel Rhyddlad -	40 22 20	148937
Llwydiart Mountain -	91 44 19	114285	Carnedd Llewellyn, highest Point -	. . .	
Moel Rhyddlad -	52 7 6	144729	Llanellian Mountain -	117 10 36	112849
Gertwyn Goch, highest Point -	. . .		Moel Rhyddlad -	43 14 38	146533
Llwydiart Mountain -	61 36 54	52624	Barrow on Carnedd David -	. . .	
Moel Rhyddlad -	37 28 40	76090	Llanellian Mountain -	15 46 32	66982
South-east Chimney of Bodorgan House -	. . .		Moel Rhyddlad -	116 57 12	20429
Llwydiart Mountain -	54 15 54	47460	Flagstaff on Skerry Island -	. . .	
Moel Rhyddlad -	33 41 17	63367	Llanellian Mountain -	124 48 22	52421
Windmill near Tiesdraeth -	. . .		Moel Rhyddlad -	26 49 26	95386
Llwydiart Mountain -	84 18 23	166668	Windmill near Llandonna -	. . .	
Moel Rhyddlad -	67 26 59	179576	Llanellian Mountain -	52 40 23	30357
Pile of Stones on a high Hill near Edern -	. . .		Moel Rhyddlad -	33 16 10	44004
			Llanellian Mountain -	. . .	
			Moel Rhyddlad -	28 10 56	10834
			Moel Rhyddlad -	6 23 43	45935
			Amlwch Steeple -	. . .	

Names of Stations and intersected Objects.	Observed Angles.	Distances in Feet.	Names of Stations and intersected Objects.	Observed Angles.	Distances in Feet.
Llanellian Mountain -	14 44 48	56238	Llanellian Mountain -	25 44 43	15144
Moel Rhyddlid -	86 44 54	14338	Cyrn y Brain Mountain	81 53 48	66445
Highest Point of the West Mouse -	.	.	Pile of Stones on Cader Ferwyn -	.	.
Llanellian Mountain -	81 19 42	3995	Base Line on Rhuddlan Marsh	245 14.3	feet.
Moel Rhyddlid -	4 8 16	54739	East End of Base -	128 28 45	12670
Llanellian Spire -	.	.	West End of Base -	17 1 17	33882
Llanellian Mountain -	117 18 17	6235	St. Asaph Cathedral -	.	.
Moel Rhyddlid -	5 27 5	58323	East End of Base -	102 22 45	1591
Signal Staff on Point Elanus -	.	.	West End of Base -	3 34 37	24904
Llanellian Mountain in Anglesea from Garreg Mountain	221262.5	feet.	Rhuddlan Steeple -	.	.
Llanellian Mountain -	80 33 58	6235	East End of Base -	8 9 59	24390
Garreg Mountain -	1 35	20326	West End of Base -	83 52 37	3484
Signal Staff on Point Elanus -	.	.	Abergole Steeple -	.	.
Llanellian Mountain in Denbighshire from Garreg Mountain	95119.6	feet.	East End of Base -	143 40 2	58508
Llanellian Mountain -	10 0 41	19970	West End of Base -	25 49 7	79593
Garreg Mountain -	40 19 17	21463	Earl Grosvenor's Summer House -	.	.
Signal Staff near Gwan-nysguer -	.	.	East End of Base -	151 23 42	23530
Llanellian Mountain -	27 59 39	110527	West End of Base -	14 0 12	46556
Garreg Mountain -	92 43 33	51335	Goperlin Fire Beacon.	.	.
Moel Fammau -	.	.	East End of Base -	38 54 15	23723
Llanellian Mountain -	9 30 57	81825	West End of Base -	67 53 18	16081
Garreg Mountain -	43 10 8	19772	Melwyn Glodfa Old Windmill -	.	.
St. Elmo Summer House	.	.	East End of Base -	9 53 0	33824
Llanellian Mountain in Denbighshire from Llanellian Mountain in Anglesea	134707.5	feet.	West End of Base -	146 36 31	10549
Llanellian Mountain -	138 37 5	81840	Signal Staff on Cave Hill	.	.
Llanellian Mountain -	15 25 23	203434	East End of Base from Moelfre Issa	26427.8	ft.
St. Elmo Summer House	.	.	East End of Base -	81 30 13	112860
Llanellian Mountain -	9 49 4	88262	Moelfre Issa -	85 0 23	112047
Llanellian Mountain -	17 30 0	50049	Highest Point of Moel Morwib -	.	.
Llandonna Signal Staff	.	.	East End of Base from Gwan-nysguer Down	25981.2	feet.
Llanellian Mountain in Denbighshire from Cyrn y Brain Mountain	145773.8	feet.	East End of Base -	114 34 41	8145
Llanellian Mountain -	13 24 32	110527	Gwan-nysguer Down -	19 51 25	25170
Cyrn y Brain Mountain	33 49 6	46052	Flagstaff at Wygfair -	.	.
Moel Fammau -	.	.	East End of Base -	10 11 42	23528
			Gwan-nysguer Down -	103 48 38	6757
			Goperlin Fire Beacon	.	.

Names of Stations and inter- sected Objects.	Observed Angles.	Distance in Feet.	Names of Stations and inter- sected Objects.	Observed Angles.	Distances in Feet.
West End of Base from Moelfre Issa	17602,2 ft.		Garreg Mountain -	43 14 41	79498
West End of Base -	70 51 15	10548	Delamere Forest -	34 27 14	96273
Moelfre Issa -	35 10 2	17301	St. Paul's, Liverpool -		
Signal Staff on Cave Hill			Delamere Forest from Ashley Heath	129401,1	feet.
Cyrn y Brain Mountain from Long Mountain			Delamere Forest -	34 18 16	34050
144778,5 feet.			Ashley Heath -	10 43 47	103076
Cyrn y Brain Mountain	48 54 57	66443	Beeston Castle, highest		
Long Mountain	26 20 53	112838	Point -		
Pile of Stones on Cader			Delamere Forest from Belle-field Hill	53307,1	feet.
Ferwyn -			Delamere Forest -	28 33 50	40741
Cyrn y Brain Mountain	125	35682	Belle-field Hill -	48 1 29	26202
Long Mountain -	10	167846	Halton Castle -		
Fire Beacon near Caer-			Delamere Forest	11 15 56	78654
gwrte Castle -			Belle-field Hill -	147 11 18	28356
Cyrn y Brain Mountain	124 32 49	82609	Winwick Spire		
Long Mountain -	19 32 56	203346	Delamere Forest from Billinge Beacon	104463,5	feet.
Trinity Spire, Chester -			Delamere Forest -	15 53 24	148512
Cyrn y Brain Mountain from Delamere Forest			Billinge Beacon -	133 20 33	55910
126431,6 feet.			Rivington Pike -		
Cyrn y Brain Mountain	16 41 6	190893	Delamere Forest -	18 32 56	107223
Delamere Forest -	135 49 58	78661	Billinge Beacon -	17 22 52	87062
Winwick Spire -			Bidston Lighthouse		
Cyrn y Brain Mountain	59 36 56	63661	Delamere Forest from Heswell Hill	99750,6 ft.	
Delamere Forest -	20 14 0	109067	Delamere Forest	21 32 16	96271
Moel y Gaer Fire Beacon			Heswell Hill -	73 54 4	36785
Cyrn y Brain Mountain from Garreg Mountain			St. Paul's, Liverpool -		
97450 feet.			Delamere Forest -	111 22	34059
Cyrn y Brain Mountain	14 46 20	63664	Heswell Hill -	15 47	116564
Garreg Mountain -	24 20 13	39391	Beeston Castle -		
Moel y Gaer Fire Beacon			Heswell Hill from Billinge Beacon	105303,5 ft.	
Cyrn y Brain Mountain	31 14 29	94662	Heswell Hill -	39 4	25400
Garreg Mountain -	71 24 31	51799	Billinge Beacon -	10 35	87068
Neston Steeple -			Bidston Lighthouse		
Cyrn y Brain Mountain	64 26 10	82610	Heswell Hill -	164 30 3	212108
Garreg Mountain -	50 19 50	96815	Billinge Beacon -	10 22 17	314842
Trinity Spire, Chester -			Highest Point of Tryfan		
Garreg Mountain from Delamere Forest			Rock in Wales -		
137294					
feet.					
Garreg Mountain	49 8 8	63044			
Delamere Forest	26 24	107229			
Bidston Lighthouse					

Names of Stations and intersected Objects.	Observed Angles.	Distances in Feet.	Names of Stations and intersected Objects.	Observed Angles	Distances in Feet.
Heswell Hill -	51 43 17	76157	Garreg Mountain -	35 53 26	44147
Billinge Beacon -	45 48 22	83383	Heswell Hill -	68 42 25	27777
N. W. Landmark near Formby -	.	.	Helbre Lightbouse -	.	.
Heswell Hill -	46 55 55	75453	Garreg Mountain -	20 10 25	51792
Billinge Beacon -	45 42 22	77010	Heswell Hill -	98 47 32	18074
S. E. Landmark near Formby -	.	.	Neston Steeple -	.	.
Heswell Hill -	36 57 37	60093	Garreg Mountain -	83 4 5	23385
Billinge Beacon -	32 14 25	67729	Heswell Hill -	28 20 46	48893
Crosby Steeple -	.	.	Point of Air Lightbouse -	.	.
Heswell Hill -	92 7 20	27779	Garreg Mountain -	38 9 41	21166
Billinge Beacon -	14 37 53	109896	Heswell Hill -	24 7 10	32004
Helbre Lightbouse -	.	.	Pen Maes Amwell Windmill -	.	.
Heswell Hill -	23 20 27	22120	Garreg Mountain -	12 45 21	74563
Billinge Beacon -	5 53 13	85445	Heswell Hill -	148 30 16	31513
Bebington Spire -	.	.	Eastbam Spire -	.	.
Heswell Hill -	132 28 58	48899	Cyrn y Brain Mountain from Heswell Hill		
Billinge Beacon -	14 36 42	142952	108837.6 feet.		
Point of Air Lightbouse -	.	.	Cyrn y Brain Mountain -	16 29 5	110635
Heswell Hill -	28 18 30	68633	Heswell Hill -	84 59 34	31514
Billinge Beacon -	35 57 2	55438	Eastbam Spire -	.	.
Sephton Spire -	.	.	Cyrn y Brain Mountain -	39 31 48	82603
Heswell Hill -	8 21 54	46312	Heswell Hill -	49 21 35	69286
Billinge Beacon -	6 27 43	59864	Trinity Spire, Chester -	.	.
Wavertree Steeple -	.	.	Heswell Hill from Belle-field Hill	113 961.3 ft.	
Heswell Hill -	24 58 35	93259	Heswell Hill -	24 27 7	73223
Billinge Beacon -	62 11 42	44518	Belle-field Hill -	32 38 53	56182
Windmill on the Race-ground near Ormskirk -	.	.	Prescot Spire -	.	.
Heswell Hill -	62 52 50	29614	Heswell Hill -	45 27 12	43937
Billinge Beacon -	16 1 11	95513	Belle-field Hill -	20 38 17	88840
Leasowes Lightbouse -	.	.	Everton Flagstaff -	.	.
Garreg Mountain from Heswell Hill	45852.5 f.		Billinge Beacon from Belle-field Hill	63369.2 ft.	
Garreg Mountain -	45 28 23	100938	Billinge Beacon -	89 18 48	63033
Heswell Hill -	109 6 28	76156	Belle-field Hill -	46 11 21	88843
N. W. Landmark near Formby -	.	.	Everton Flagstaff -	.	.
Garreg Mountain -	42 4 25	102951	Billinge Beacon -	62 0 30	34825
Heswell Hill -	113 53 50	75454	Belle-field Hill -	33 10 57	56186
S. E. Landm. near Formby -	.	.	Prescot Spire -	.	.
			Billinge Beacon -	23 47 38	63724
			Belle-field Hill -	78 51 49	26203
			Hallon Castle -	.	.

Names of Stations and intersected Objects.	Observed Angles.	Distances in Feet.	Names of Stations and intersected Objects.	Observed Angles.	Distances in Feet.
Billinge Beacon -	109 15 17	55917	Billinge Beacon -	105 39 4	42741
Belle-field Hill -	32 50 0	97363	Go Hill -	35 16 35	71264
Rivington Pike -	. . .		Blackrod Steeple -	. . .	
Billinge Beacon -	74 59 10	85446	Billinge Beacon -	9 56 40	45926
Belle-field Hill -	63 27 6	92256	Go Hill -	79 54 15	8056
Bebington Spire -	. . .		Aughton Spire -	. . .	
Billinge Beacon -	3 57 7	50834	Billinge Beacon -	22 40 55	63726
Belle-field Hill -	15 28 25	13132	Go Hill -	116 18 31	27413
Sankey Street Chapel, Warrington -	. . .		Blundell's Summer House -	. . .	
Billinge Beacon -	7 20 47	51889	Llanelian Mountain in Denbighshire from Billing Beacon 239683 feet.		
Belle-field Hill -	29 7 45	13630	Llanelian Mountain -	8 31 56	184143
Warrington Steeple -	. . .		Billinge Beacon -	25 23 13	63726
Billinge Beacon -	57 18 29	102305	Blundell's Summer House -	. . .	
Belle field Hill -	84 37 3	86480	Garreg Mountain from Billing Beacon 149374.3 feet.		
St. Mary's Spire, Manchester -	. . .		Garreg Mountain -	15 54 47	122863
Billinge Beacon -	129 50 6	31489	Billinge Beacon -	47 10 34	45929
Belle-field Hill -	16 8 33	86969	Aughton Spire -	. . .	
Standish Spire -	. . .		Heswell Hill from Go Hill 93756.3 feet.		
Billinge Beacon from Go Hill 46647.8 feet.			Heswell Hill -	25 25 47	76159
Billinge Beacon -	86 23 15	51486	Go Hill -	52 37 48	41149
Go Hill -	35 7 42	54610	N. W. Landmark near Formby -	. . .	
Standish Spire -	. . .		Heswell Hill -	20 38 25	75454
Billinge Beacon -	42 39 15	22825	Go Hill -	48 58 12	35258
Go Hill -	27 22 52	33628	S. E. Landm. near Formby -	. . .	
Asburst Beacon -	. . .		Heswell Hill -	1 54 8	97911
Billinge Beacon -	26 57 20	55438	Go Hill -	141 36 16	5233
Go Hill -	96 17 6	25282	Ormskirk Spire -	. . .	
Sephton Spire -	. . .		Heswell Hill -	1 18 55	93260
Billinge Beacon -	30 39 53	67721	Go Hill -	76 19 0	2203
Go Hill -	108 34 12	36435	Windmill on the Race-ground near Ormskirk -	. . .	
Crosby Steeple -	. . .		Heswell Hill -	36 35 18	29607
Billinge Beacon -	20 27 49	77220	Go Hill -	14 9 11	72175
Go Hill -	133 35 20	37273	Leasowe's Lighthouse -	. . .	
North Meads Spire -	. . .		Billinge Beacon from Wittle Hill 113827.4 feet.		
Billinge Beacon -	3 12 26	58654	Billinge Beacon -	35 47 10	102312
Go Hill -	164 35 17	12358	Wittle Hill -	62 44 11	67305
Halsull Spire -	. . .		St. Mary's Spire, Manches -	. . .	

Names of Stations and inter- sected Objects.	Observed Angles.	Distances in Feet.	Names of Stations and inter- sected Objects.	Observed Angles.	Distances in Feet.
Wittle Hill - - -	98 54 58	8823	Rumbles Moor - -	39 42 0	116405
Billinge Beacon - -	76 45 23	115524	Ledstone Beacon - -	68 19 8	80020
Knoll Hill - - -	. . .	.	Blackett's Gazebo - -	. . .	.
Knoll Hill - - -	156 33 49	35962	Rumbles Moor - -	35 1 59	180819
Wittle Hill - - -	18 52 56	44196	Ledstone Beacon - -	105 34 36	107756
Bonnington Steeple - -	. . .	.	Woburnstand Monument	. . .	.
Knoll Hill - - -	137 27 6	40456	Rumbles Moor - -	30 19 10	162023
Wittle Hill - - -	35 18 25	47333	Ledstone Beacon - -	104 13 41	84381
Lord Gray's Belvidere	. . .	.	York Spire - - -	. . .	.
Wittle Hill from Boulsworth Hill	64 50 8	feet	Rumbles Moor - -	25 17 13	107386
Wittle Hill - - -	54 38 20	63509	Ledstone Beacon - -	64 21 2	50884
Boulsworth Hill - -	61 41 33	58828	Wakefield Spire - -	. . .	.
Justice Waller's Pleasure House - - -	. . .	.	Ledstone Beacon from Staincross Heights 78539.6 feet.		
Boulsworth Hill from Ingleborough Hill 141994.3 feet.			Ledstone Beacon - -	7 23 4	73996
Boulsworth Hill - -	0 4 39	142051	Staincross Heights - -	61 17 53	10843
Ingleborough Hill - -	106 24 0	200	Staincross Fire Beacon	. . .	.
Old Building on Inglebo- rough Hill - -	. . .	.	Ledstone Beacon - -	13 8 32	80022
Boulsworth Hill - -	12 13 24	127448	Staincross Heights - -	87 54 41	18207
Ingleborough Hill - -	57 7 52	32126	Blackett's Gazebo - -	. . .	.
Highest Rock on Penni- gant Hill - -	. . .	.	Ledstone Beacon - -	24 6 56	107753
Boulsworth Hill from Rumbles Moor		68367.9 feet.	Staincross Heights - -	114 10 15	48256
Boulsworth Hill - -	58 27 15	140262	Woburnstand Monument	. . .	.
Rumbles Moor - - -	92 24 8	119640	Ledstone Beacon - -	17 6 38	50883*
Highest Barrow on Cam- pell - - -	. . .	.	Staincross Heights - -	26 33 5	33491
Boulsworth Hill - -	55 16 54	39128	Wakefield Spire - -	. . .	.
Rumbles Moor - - -	34 54 40	56196	Ledstone Beacon - -	20 5 52	51060
Pinnow Fire Beacon - -	. . .	.	Staincross Heights - -	29 47 53	35307
Rumbles Moor from Ledstone Beacon		119122.5 feet.	Wakefield New Church	. . .	.
Rumbles Moor - - -	55 45 31	121777	Ledstone Beacon - -	120 59 59	50820
Ledstone Beacon - -	74 4 37	74002	Staincross Heights - -	22 34 4	113459
Staincross Fire Beacon	. . .	.	Brayton Spire - -	. . .	.
Rumbles Moor - - -	53 45 27	44971	Ledstone Beacon - -	109 35 22	75941
Ledstone Beacon - -	21 24 12	99390	Staincross Heights - -	34 30 45	126275
Fire Beacon on a Rock near Otley - - -	. . .	.	Drax Spire - - -	. . .	.
			Ledstone Beacon - -	38 54 13	82705
			Staincross Heights - -	74 40 49	53853
			Bilham Grange Summer House - - -	. . .	.



Names of Stations and inter- sected Objects.	Observed Angles.	Distance in Feet.	Names of Stations and inter- sected Objects.	Observed Angles.	Distances in Feet.
<b>Rumbles Moor from Staincross Heights</b> 132613,5 feet.			<b>Ledstone Beacon</b> -	66° 10' 39"	92388
			<b>Black Hambleton</b> -	28 12 4	178845
<b>Rumbles Moor</b> -	46° 25' 13"	47469	<b>Fire Beacon westward of</b>		
<b>Staincross Heights</b> -	18 59 46	105643	<b>Otley</b> -	-	-
<b>Swilling End Fire Beacon</b> . . .	.	.	<b>Rumbles Moor from Black Hambleton</b> 192504,3 feet.		
<b>Rumbles Moor</b> -	17 51 7	50788	<b>Rumbles Moor</b> -	57 14 2	28147
<b>Staincross Heights</b> -	10 28 4	85697	<b>Black Hambleton</b> -	7 36 18	178844
<b>Windm. on Clayton Heights</b> . . .	.	.	<b>Fire Beacon westward of</b>		
<b>Rumbles Moor</b> -	6 27 0	125028	<b>Otley</b> -	-	-
<b>Staincross Heights</b> -	59 11 8	16354	<b>Rumbles Moor</b> -	155 30 21	47476
<b>High Howland Church</b>			<b>Black Hambleton</b> -	4 46 25	236528
<b>Tower</b> -	.	.	<b>Swilling End Fire Beacon</b>		
<b>Ledstone Beacon from Hambleton Down</b> 173679,7 feet.			<b>Hambleton Down from Wilton Beacon</b> 133262,7 feet.		
<b>Ledstone Beacon</b> -	52 24 54	99397	<b>Hambleton Down</b> -	24 39 11	197832
<b>Hambleton Down</b> -	34 51 57	137787	<b>Wilton Beacon</b> -	119 25	94738
<b>Fire Beacon on a Rock near</b>			<b>Howden Steeple</b>		
<b>Otley</b> -	-	-	<b>Hambleton Down from Black Hambleton</b> 23119,3 feet.		
<b>Ledstone Beacon</b> -	95 7 49	75946	<b>Hambleton Down</b> -	104 34 38	76521
<b>Hambleton Down</b> -	22 44 25	195682	<b>Black Hambleton</b> -	60 13 13	85326
<b>Drax Spire</b> -	.	.	<b>Northmost Tower on Ripon</b>		
<b>Ledstone Beacon</b> -	88 46 35	98507	<b>Church</b>		
<b>Hambleton Down</b> -	29 51 21	197832	<b>Wilton Beacon from Hunsley Beacon</b> 82862,3 ft.		
<b>Howden Steeple</b> -	.	.	<b>Wilton Beacon</b> -	42 50 24	94741
<b>Ledstone Beacon</b> -	48 41 0	139139	<b>Hunsley Beacon</b> -	78 15 19	65797
<b>Hambleton Down</b> -	51 56 32	132722	<b>Howden Steeple</b> -	.	.
<b>Bishop Wilton Spire</b> -	.	.	<b>Wilton Beacon</b> -	27 6 26	57395
<b>Ledstone Beacon</b> -	26 35 2	33280	<b>Hunsley Beacon</b> -	39 27 34	41151
<b>Hambleton Down</b> -	5 54 29	144687	<b>Home Church Tower</b> -	.	.
<b>Obelisk near Bramham</b>			<b>Burleigh Moor from Easington Heights</b> 42270,7 feet.		
<b>Ledstone Beacon from Black Hambleton</b> 194930,8 feet.			<b>Burleigh Moor</b>	40 44 51	51504
<b>Ledstone Beacon</b> -	23 45 4	33280	<b>Easington Heights</b> -	84 28 29	33774
<b>Black Hambleton</b> -	4 39 33	165015	<b>Danby Fire Beacon</b> -	.	.
<b>Obelisk near Bramham</b> . . .	.	.	<b>Burleigh Moor</b> -	126 21 42	54368
<b>Ledstone Beacon</b> -	51 30 58	139135	<b>Easington Heights</b> -	30 26 25	86416
<b>Black Hambleton</b> -	45 8 56	153627	<b>Hartlepool Steeple</b> -	.	.
<b>Bishop Wilton Spire</b> -	.	.	<b>Burleigh Moor</b> -	138 30 6	87740
<b>Ledstone Beacon</b> -	86 37 10	50823	<b>Easington Heights</b> -	28 17 48	122640
<b>Black Hambleton</b> -	14 48 24	198526	<b>A white Spire</b> -	-	-
<b>Brayton Spire</b> -	.	.			

Names of Stations and inter- sected Objects.	Observed Angles.	Distances in Feet.	Names of Stations and inter- sected Objects.	Observed Angles.	Distances in Feet.
Burleigh Moor -	149 34 18	110856	Burleigh Moor -	72 42 42	53175
Easington Heights -	22 9 33	148852	Bottom Head -	48 21 8	67947
Signal Staff -	. . .	.	Windmill near Stockton	. . .	.
Burleigh Moor -	119 23 4	162322	Bottom Head from Easington Heights		77788,9
Easington Heights -	49 14 22	186731	feet.		
Signal Staff near Sunderl.	. . .	.	Bottom Head -	30 31 52	13433
Burleigh Moor -	121 58 14	143727	Easington Heights -	5 53 2	66569
Easington Heights -	45 50 51	169935	Westerdale Station -	. . .	.
Sunderland Steeple -	. . .	.	Bottom Head -	52 39 56	107509
Burleigh Moor -	135 19 28	14811	Easington Heights -	81 37 6	86397
Easington Heights -	11 9 24	53820	Hartlepool Church Tower	. . .	.
A Church Tower with high Pinnacles -	. . .	.	Bottom Head -	52 3 1	103348
Burleigh Moor -	104 59 47	16715	Easington Heights -	82 33 33	86163
Easington Heights -	19 6 44	49313	Hartlepool Signal Staff	. . .	.
Gable End of a House at Redcar -	. . .	.	Loosehoe Moor from Bottom Head		35244,2 feet.
Burleigh Moor -	122 10 46	19531	Loosehoe Moor -	126 52 48	141943
Easington Heights -	17 25 26	59205	Bottom Head -	43 18 47	165513
Centre Pediment of a House at Colbam -	. . .	.	Church Tower near Scar- borough -	. . .	.
Burleigh Moor -	100 32 7	16038	Hunsley Beacon from Crowle Beacon		87370 ft.
Easington Heights -	19 13 48	47875	Hunsley Beacon -	113 23 1	48631
Redcar Staff -	. . .	.	Crowle Beacon -	22 42 25	115633
Burleigh Moor -	120 26 16	48875	Nunburnholme Station -	. . .	.
Easington Heights -	32 9 20	79176	Hunsley Beacon -	1 9 56	89520
Windmill on the Summit of a Hill near Houghton	. . .	.	Crowle Beacon -	139 29 49	2804
Burleigh Moor -	151 57 52	25891	Crowle Steeple -	. . .	.
Easington Heights -	10 35 4	66251	Clifton Beacon from Crowle Beacon		102613,6
Church Tower among Trees	. . .	.	feet.		
Burleigh Moor from Bottom Head		60956,5 feet.	Clifton Beacon -	41 40 20	123690
Burleigh Moor -	24 24 11	26094	Crowle Beacon -	82 54 53	82871
Bottom Head -	16 9 54	38724	Selby Steeple -	. . .	.
Roseberry Topping -	. . .	.	Crowle Beacon -	85 10 58	88930
Burleigh Moor -	137 31 38	54367	Clifton Beacon -	42 53 36	129893
Bottom Head -	19 57 52	107520	Brayton Spire -	. . .	.
Hartlepool Steeple -	. . .	.	Clifton Beacon -	47 5 56	73349
Burleigh Moor -	78 27 10	57827	Crowle Beacon -	45 33 53	75248
Bottom Head -	48 55 31	75156	Gringley Steeple -	. . .	.
Stockton Market House	. . .	.	Clifton Beacon -	24 26 33	81680
			Crowle Beacon -	50 6 20	44052
			Axbolme Steeple -	. . .	.

Names of Stations and intersected Objects.	Observed Angles.	Distance in Feet.	Names of Stations and intersected Objects.	Observed Angles.	Distances in Feet.
Clifton Beacon	124 42 6	25109	North End of Base to South End of Base		
Crowle Beacon	10 6 59	118928	26342.7 feet.		
<i>Loughlon Spire</i>					
Clifton Beacon	21 53 6	46610	North End of Base -	22 27 39	5851
Crowle Beacon	16 18 48	61852	South End of Base -	6 5 39	21055
<i>Hatfield Steeple</i>			<i>Wroot Chapel</i> -		
Clifton Beacon	9 56 5	82725	Go Hill from Beryl Hill 104867.8 feet.		
Crowle Beacon	34 2 19	25497	Go Hill -	80 46	5231
<i>Tbor ie Steeple</i>			Beryl Hill -	2 50 2	104158
Gringley Beacon from Crowle Beacon	74543.4		<i>Ormskirk Spire</i>		
feet.					
Gringley Beacon	7 58 2	45578	Go Hill -	3 17 4	67162
Crowle Beacon	12 7 30	30076	Beryl Hill -	5 49 3	38013
<i>Epsworth Steeple</i>			<i>Flagstaff near North Meul.</i>		
Crowle Beacon	12 14 55	22457	Go Hill -	104 11 5	33629
Gringley Beacon	5 10 33	52812	Beryl Hill -	16 4 4	17721
<i>Belton Steeple</i>			<i>Asburst Beacon</i>		
Gringley Beacon from Clifton	750681.1		Beryl Hill -	120 43 14	2973
feet.			Ashurst Beacon -	58 3 4	119268
Gringley Beacon -	33 19 4	18483	<i>North Station on the Cliff</i>		
Clifton Beacon -	9 39 49	60481	<i>near Blackpool</i>		
<i>Mission Steeple</i>			Beryl Hill -	23 25 12	3316
Gringley to North End of Base	44338.2		North Station -	93 0 5	1320
feet.			<i>South Station on the Cliff</i>		
Gringley Beacon	21 18 32	52817	<i>near Blackpool</i> -	63 33 57	
North End of Base	104 13 50	19801	Beryl Hill -	80 41 39	6910
<i>Belton Steeple</i>			North Station -	74 46 25	7067
Gringley Beacon	24 6 14	45580	<i>Flagstaff with a Vane on</i>		
North End of Base	81 38 58	18814	<i>the Sea-coast</i>		
<i>Epsworth Steeple</i>			Beryl Hill -	100 19 56	6470
Gringley Beacon	91 11 38	30661	North Station -	56 59 57	7590
Clifton Beacon	22 2 37	81678	<i>Bispham Church Tower</i>		
<i>Axbolme Steeple</i>			Beryl Hill -	103 41 1	32912
Gringley Beacon	80 31 8	10724	North Station -	71 24 0	33739
Clifton Beacon	8 12 41	74061	<i>Summer House near Rossal</i>		
<i>Ratford Spire</i>			Beryl Hill -	104 6 55	6911
Staincross Heights from Clifton Beacon	79929.2		South Station -	53 16 10	8363
feet.			<i>Flagstaff with a Vane near</i>		
Staincross Heights	11 31 2	67978	<i>the Sea-coast</i>		
Clifton Beacon	15 32 21	19017	Beryl Hill -	123 45 13	6463
<i>Milton Steeple</i>			South Station -	37 53 1	8752
			<i>Bispham Church Tower</i>		

Names of Stations and inter- sected Objects.	Observed Angles.	Distances in Feet.	Names of Stations and inter- sected Objects.	Observed Angles.	Distances in Feet.
Beryl Hill - - -	127 6 34	32915	Dent Hill from Scilly Bank 25910,8 feet.		
South Station - - -	48 33 34	35016	Dent Hill - - -	118 27 25	42963
Summer House near Rossal	.	.	Scilly Bank - - -	39 9 29	59827
Beryl Hill from Black Comb 164674,5 feet.			Pile of Stones on Red Pike	.	.
Beryl Hill - - -	18 12 52	25622	Dent Hill - - -	83 45 34	32329
Black Comb - - -	3 52 46	136851	Scilly Bank - - -	55 7 39	39172
Landmark, Rossal Point	.	.	Pile of Stones on Blake Fell	.	.
Beryl Hill - - -	96 58 13	11035	Dent Hill - - -	98 4 10	51026
Black Comb - - -	3 46 29	166373	Scilly Bank - - -	56 47 21	60384
Poulton Church Tower	.	.	Highest Point of Grasmere Fell - - -	.	.
Black Comb from Ingleborough Hill 201970,3 feet.			Dent Hill - - -	94 27 45	37030
Black Comb - - -	52 11 26	60478	Scilly Bank - - -	61 54 31	64450
Ingleborough Hill - - -	16 9 35	171678	Grisdale Pike - - -	.	.
Pile of Stones on Coniston Fell - - -	.	.	Dent Hill - - -	7 44 41	20230
Black Comb - - -	79 58 11	75972	Scilly Bank - - -	24 55 36	6453
Ingleborough Hill - - -	21 37 19	203024	Windmill near Wbelpside Hall - - -	.	.
Highest Point of Sca-Fell	.	.	Dent Hill - - -	17 45 28	53191
Black Comb - - -	55 50 8	78749	Scilly Bank - - -	146 45 7	29589
Ingleborough Hill - - -	22 26 38	170675	Chapel on Workington Head - - -	.	.
Peel Castle - - -	.	.	Dent Hill from Crif-Fell Hill 162371,1 feet.		
Black Comb from The Calf 178609,8 feet.			Dent Hill - - -	103 22 32	43926
Black Comb - - -	47 7 42	135152	Crif-Fell Hill - - -	13 54 42	177747
The Calf - - -	48 49 3	131607	The Pillar - - -	.	.
Lancaster Church Tower near the Castle - - -	.	.	Dent Hill - - -	1 0 28	136655
Black Comb - - -	29 43 7	60481	Crif-Fell Hill - - -	5 20 2	25849
The Calf - - -	13 22 37	129599	Lighthouse, Saturness Point - - -	.	.
Coniston Fell - - -	.	.	Dent Hill - - -	34 30 48	20229
Black Comb - - -	60 48 18	85156	Crif-Fell Hill - - -	4 29 53	146152
The Calf - - -	28 28 20	155932	Windmill near Wbelpside House - - -	.	.
Pile of Stones on Great Gavel - - -	.	.	Scilly Bank from Crif-Fell Hill 139727,3 feet.		
Black Comb from Dent Hill 95963,3 feet.			Scilly Bank - - -	131 0 27	23356
Black Comb - - -	7 42 54	119396	Crif-Fell Hill - - -	6 29 6	156051
Dent Hill - - -	144 21 22	27505	Lighthouse, St. Bee's Head - - -	.	.
Windmill near Whitehaven	.	.	Black Comb - - -	27 11 6	88107
Black Comb - - -	66 23 47	43928	Dent Hill - - -	.	.
Pile of Stones on the Pillar	.	.			

Names of Stations and intersected Objects	Observed Angles.	Distances in Feet	Names of Stations and intersected Objects.	Observed Angles.	Distances in Feet.
The Calf from Ingleborough Hill	77° 6'	14,6 feet.	Cross Fell - - -	2° 11' 33"	113385
The Calf - - -	120° 52' 29"	191951	High Pike - - -	29° 42' 27"	8753
Ingleborough Hill - - -	39° 58' 13"	203020	Pile of Stones on Carrock Fell - - -	. . .	
Sca-Fell - - -	. . .		Cross Fell - - -	68° 2' 3"	74815
The Calf - - -	70° 34' 6"	179999	High Pike - - -	36° 44' 59"	115967
Ingleborough Hill - - -	84° 2' 11"	170670	Cold-Fell Pike - - -	. . .	
Peel Castle - - -	. . .		Cross Fell - - -	79° 24' 13"	44144
The Calf - - -	97° 3' 30"	131604	High Pike - - -	21° 2' 34"	120846
Ingleborough Hill - - -	47° 7' 9"	97174	Duffenside Beacon - - -	. . .	
Lancaster Church Tower - - -	. . .		Cross Fell - - -	11° 21' 49"	121303
The Calf - - -	17° 38' 50"	95829	High Pike - - -	85° 15' 55"	23983
Ingleborough Hill - - -	115° 15' 21"	32122	Saddle Back - - -	. . .	
Pennigant Hill - - -	. . .		Cross Fell from Crif-Fell Hill	255886, 1 feet.	
The Calf - - -	35° 21' 10"	62612	Cross Fell - - -	48° 22' 48"	74820*
Ingleborough Hill - - -	53° 45' 58"	44914	Crif-Fell Hill - - -	15° 10' 38"	213643
Kirkby Lonsdale Church Tower - - -	. . .		Cold Fell Pike - - -	. . .	
The Calf - - -	6° 15' 42"	56375	Cross Fell - - -	59° 45' 0"	44144
Ingleborough Hill - - -	15° 54' 24"	22435	Crif-Fell Hill - - -	9° 16' 10"	236739
Wbernside in Ingleton Fells - - -	. . .		Duffenside Beacon - - -	. . .	
The Calf from Water Crag	89° 38' 4	feet.	Cross Fell - - -	21° 50' 47"	113386
The Calf - - -	81° 38' 29"	56376	Crif-Fell Hill - - -	15° 38' 49"	156440
Water Crag - - -	34° 29' 22"	98502	Carrock Fell - - -	. . .	
Wbernside - - -	. . .		Cross Fell from Water Crag	125741, 8 feet.	
The Calf from Cross Fell	122505, 3 feet.		Cross Fell - - -	13° 7' 52"	101367
The Calf - - -	26° 5' 56"	122388	Water Crag - - -	40° 26' 6"	35506
Cross Fell - - -	76° 49' 57"	55295	Highest Pile on the Nine Standards - - -	. . .	
Penrith Beacon - - -	. . .		Cross Fell - - -	89° 3' 29"	55673
The Calf from High Pike	169069, 5 feet.		Water Crag - - -	24° 2' 3"	136676
The Calf - - -	19° 31' 51"	122390	Pile of Stones on Kilbope Law - - -	. . .	
High Pike - - -	37° 16' 53"	67506	Crif Fell Hill from High Pike	147733, 5 feet.	
Penrith Beacon - - -	. . .		Crif-Fell Hill - - -	38° 41' 44"	25812
The Calf - - -	31° 13' 25"	155925	High Pike - - -	7° 12' 30"	128605
High Pike - - -	66° 9' 8"	88373	Lighthouse, Saturness Point - - -	. . .	
Pile of Stones on Great Gavel - - -	. . .		Crif-Fell Hill - - -	65° 38' 23"	25317
Cross Fell from High Pike	120904, 9 feet.		High Pike - - -	9° 32' 8"	139215
Cross Fell - - -	33° 14' 21"	171570	Carlaveroc Castle - - -	. . .	
High Pike - - -	103° 30' 35"	96720			
Bow Fell - - -	. . .				

Names of Stations and intersected Objects.	Observed Angles.	Distances in Feet.	Names of Stations and intersected Objects.	Observed Angles.	Distances in Feet.
Crif-Fell Hill - - -	0 50 47	79672	Bottom Head - - -	12 57 27	107496
High Pike - - -	32 4 14	111240	Wordslow Hill - - -	18 28 20	76074
Annan Spire - - -	. . .	.	Hartlepool Church Tower	. . .	.
Crif-Fell - - -	48 53 22	78148	Wordslow Hill from Easington Heights		161215.8 feet.
High Pike - - -	31 25 46	112917	Wordslow Hill -	101 54 25	28605
Spire on the Townhouse in Annan - - -	. . .	.	Easington Heights -	9 30 28	169445
Crif-Fell - - -	32 20 38	213478	Sunderland Lighthouse	. . .	.
High Pike - - -	105 56 30	118778	Wordslow Hill from Burleigh Moor		130039.1 feet.
Byers Pike - - -	. . .	.	Wordslow Hill -	113 13 12	28609
Crif-Fell - - -	6 23 3	164280	Burleigh Moor -	10 32 21	143744
High Pike - - -	130 21 55	23976	Sunderland Lighthouse	. . .	.
Saddle Back - - -	. . .	.	Wordslow Hill -	3 42 50	76072
Crif-Fell from Wisp Hill		186814.9 feet.	Burleigh Moor - -	5 12 10	54344
Crif-Fell - - -	20 57 29	169852	Hartlepool Church Tower	. . .	.
Wisp Hill - - -	65 6 4	66979	Wordslow Hill -	4 47 49	75978
Pile on Wbin Fell - -	. . .	.	Burleigh Moor - -	6 40 10	54703
Wisp Hill from High Pike		212277.5 feet.	Hartlepool Signal Staff	. . .	.
Wisp Hill - - -	32 38 47	160458	Wordslow Hill -	131 52 49	41747
High Pike - - -	48 16 56	115964	Burleigh Moor - -	11 8 8	160938
Cold Fell Pike - - -	. . .	.	Windmill on Marston Hill	. . .	.
Collier Law from High Pike		229938 feet.	Wordslow Hill -	129 53 34	44646
Collier Law - - -	60 25 46	222576	Burleigh Moor - -	12 10 56	162329
High Pike - - -	58 11 10	227816	Signal Staff on Marston Hill	. . .	.
Pile on Peel Fell - -	. . .	.	Burleigh Moor from Brandon Down		150771 feet.
Water Crag from Collier Law		125314.1 feet.	Burleigh Moor -	22 40 8	102690
Water Crag - - -	28 17 50	136675	Brandon Down - -	35 14 35	68586
Collier Law - - -	85 36 44	64981	Easington Church Tower	. . .	.
Kilbope Law - - -	. . .	.	Burleigh Moor -	36 55 29	162329
Water Crag - - -	29 21 23	167179	Brandon Down - -	77 50 50	99758
Collier Law - - -	103 58 31	84458	Signal Staff on Marston Hill	. . .	.
Durham Cathedral - -	. . .	.	Brandon Down from Black Hambleton		187275.6 feet.
Bottom Head from Wordslow Hill		176913.7 ft.	Brandon Down -	31 6 0	49443
Bottom Head - - -	51 53 39	19174	Black Hambleton -	9 59 36	147172
Wordslow Hill - - -	5 13 19	165769	Brusselton Folly -	. . .	.
Pile on a Hill near Stokesley	. . .	.			
Bottom Head -	13 34 34	108349			
Wordslow Hill -	19 33 28	75976			
Hartlepool Signal Staff	. . .	.			

Names of Stations and intersected Objects.	Observed Angles.	Distances in Feet.	Names of Stations and intersected Objects.	Observed Angles.	Distances in Feet.
Collier Law from Wordeslow Hill	119° 6' 13"	5613 feet	Brandon Down -	124° 41' 44"	49445
Collier Law - - -	55° 52' 39"	82633	Wordeslow Hill -	23° 55' 37"	102237
Wordeslow Hill - - -	43° 2' 19"	100232	Brusseton Folly -	.	.
Brusseton Folly - - -	.	.	Brandon Down - - -	90° 48' 3"	33343
Collier Law - - -	13° 13' 41"	84455	Wordeslow Hill -	27° 32' 14"	72114
Wordeslow Hill - - -	27° 19' 36"	42098	Merrington Church Tower	.	.
Durham Cathedral - -	.	.	Brandon Down - - -	23° 46' 52"	27664
Collier Law - - -	39° 37' 14"	81504	Wordeslow Hill -	88° 30' 26"	68581
Wordeslow Hill - - -	42° 26' 38"	77015	Easington Church Tower	.	.
Westerton Folly - - -	.	.	Brandon Down - - -	22° 43' 12"	83583
Collier Law - - -	36° 47' 55"	87550	Wordeslow Hill -	112° 52' 26"	35030
Wordeslow Hill - - -	46° 38' 56"	72120	West Boldon Spire -	.	.
Merrington Church Tower	.	.	Brandon Down - - -	29° 51' 50"	105399
Collier Law - - -	15° 59' 59"	126825	Wordeslow Hill -	118° 1' 0"	59449
Wordeslow Hill - - -	93° 45' 46"	35032	North Shields Church Tower	.	.
West Boldon Spire - -	.	.	Brandon Down - - -	40° 1' 28"	69210
Collier Law - - -	87° 39' 7"	7799	Wordeslow Hill -	76° 45' 6"	45727
Wordeslow Hill - - -	3° 44' 15"	119548	Sheriff Hill Beacon Staff	.	.
Pile of Stones on Fatberly Hill	.	.	Collier Law from Pontop Pike	56824.6 feet.	
Collier Law - - -	42° 53' 5"	181093	Collier Law - - -	131° 36' 48"	64983
Wordeslow Hill - - -	96° 3' 32"	123933	Pontop Pike - - -	25° 55' 11"	111160
Newbiggin Spire - - -	.	.	Kilbope Law - - -	.	.
Collier Law - - -	34° 1' 55"	153093	Collier Law - - -	113° 13' 26"	7800
Wordeslow Hill - - -	94° 50' 34"	85988	Pontop Pike - - -	6° 49' 25"	60328
Seaton Delaval Summer House	.	.	Pile on Fatberly Hill	.	.
Collier Law from Brandon Down	63150.5 feet.		Wordeslow Hill from Pontop Pike	72621.9 feet.	
Collier Law - - -	20° 24' 17"	81505	Wordeslow Hill - - -	1° 28' 39"	30889
Brandon Down - - -	114° 58' 56"	31350	Pontop Pike - - -	1° 5' 35"	41751
Westerton Folly - - -	.	.	Chester le Street Spire	.	.
Brandon Down from Wordeslow Hill	63478.1 feet.		Wordeslow Hill - - -	102° 0' 59"	38093
Brandon Down - - -	15° 24' 58"	22627	Pontop Pike - - -	24° 49' 19"	88752
Wordeslow Hill - - -	8° 12' 54"	42096	Whitburn Spire - - -	.	.
Durham Cathedral - -	.	.	Wordeslow Hill - - -	76° 19' 17"	123926
Brandon Down - - -	81° 29' 30"	162813	Pontop Pike - - -	70° 12' 52"	127965
Wordeslow Hill - - -	76° 15' 15"	165771	Newbiggin Spire - - -	.	.
Pile on a Hill near Stokesley	.	.	Wordeslow Hill - - -	79° 10' 2"	59449
	.	.	Pontop Pike - - -	43° 32' 21"	84150
	.	.	North Shields Church Tower	.	.

Names of Stations and intersected Objects.	Observed Angles.	Distances in Feet.	Names of Stations and intersected Objects.	Observed Angles.	Distances in Feet.
Wordsleslow Hill -	37 54 10	45728	Alnwick Moor -	50 9 12	44789
Pontop Pike -	37 33 10	46090	Rufflaw -	35 0 55	55929
Sberf Hill Beacon Staff -	.	.	High Tower on Warkworth Castle -	.	.
Wordsleslow Hill -	95 1 15	41648	Alnwick Moor -	88 5 18	65107
Pontop Pike -	30 9 50	88545	Rufflaw -	42 44 26	95879
Signal Staff on Marston Hill -	.	.	Double Pile on a Hill south-west of Linhope Cataract -	.	.
Wordsleslow Hill -	93 2 4	41748	Alnwick Moor from Blackheddon -	87 29 33	feet
Pontop Pike -	29 7 22	85661	Alnwick Moor -	32 3 18	70903
Windmill on Marston Hill -	.	.	Blackheddon -	54 3 25	46432
Collier Law from Rufflaw -	169 38 5	feet.	Flagstaff on Bambrough Castle -	.	.
Collier Law -	26 41 41	153091	Alnwick Moor -	27 31 51	71687
Rufflaw -	64 29 37	76201	Blackheddon -	54 23 53	40753
Seaton Delaval Summer House -	.	.	Signal Staff near Bambrough Castle -	.	.
Wordsleslow Hill from Rufflaw -	152 41 3	feet.	Alnwick Moor -	40 4 4	76444
Wordsleslow Hill -	29 16 11	62596	Blackheddon -	59 40 2	57011
Rufflaw -	17 22 30	102485	Lighthouse on the West Staples -	.	.
Tynemouth Lighthouse -	.	.	Alnwick Moor -	50 26 44	57544
Wordsleslow Hill -	29 35 3	60548	Blackheddon -	41 13 4	67333
Rufflaw -	16 40 51	104141	Beadnell Spire -	.	.
Flagstaff on Tynemouth Castle -	.	.	Alnwick Moor -	66 8 45	39445
Rufflaw from Alnwick Moor -	72 58 4	feet.	Blackheddon -	26 49 29	79944
Rufflaw -	48 44 21	62537	Embleton Church Tower -	.	.
Alnwick Moor -	56 18 17	56502	Alnwick Moor -	75 33 33	44548
Lighthouse on Coquet Island -	.	.	Blackheddon -	29 31 18	87551
Rufflaw -	2 36 12	75775	Dunstanbrough Castle -	.	.
Alnwick Moor -	132 5 10	4638	Alnwick Moor -	46 53 30	63809
Earl's Mount Obelisk -	.	.	Blackheddon -	46 50 19	63865
Alnwick Moor -	30 30 26	22957	Windmill on Sunderland Point -	.	.
Rufflaw -	12 26 41	54080	Alnwick Moor -	54 9 59	57544
Beacon Staff on a Hill near Sbillbolle -	.	.	Blackheddon -	41 1 57	71003
Alnwick Moor -	33 29 3	97555	Signal Staff near Beadnell -	.	.
Rufflaw -	99 15 40	54533	Alnwick Moor -	59 0 0	43908
Signal Staff near Newbiggin -	.	.	Blackheddon -	30 11 41	74832
Alnwick Moor -	51 34 6	57026	Windmill near Newton -	.	.
Rufflaw -	50 15 30	58095			
Signal Staff near Hawxley -	.	.			



Names of Stations and inter- sected Objects.	Observed Angles.	Distances in Feet.	Names of Stations and inter- sected Objects.	Observed Angles.	Distances in Feet.
Mordington Hill from Blackheddon	68 39 57	68399 feet.	Mordington Hill -	7 49 54	60344
Mordington Hill -	20 24 57	103940	Blackheddon -	43 39 17	11911
Blackheddon -	128 39 56	16436	Lowick Church Tower -	. . .	
Flagstaff on Bambrough Castle -	. . .		Mordington Hill -	35 23 11	119019
Mordington Hill -	18 48 58	99009	Blackheddon -	112 34 19	74658
Blackheddon -	128 24 34	40753	Rock on the West End of the Cbeviot -	. . .	
Signal Staff near Bam- brough Castle -	. . .		Mordington Hill -	10 12 34	42187
Mordington Hill -	. . .		Blackheddon -	15 32 44	27901
Blackheddon -	25 37 9	110426	Chesterwick Windmill -	. . .	
Lighthouse on the West Staples -	123 8 17	57021	Mordington Hill -	136 55 32	43723
Mordington Hill -	21 13 27	122637	Blackheddon -	16 34 23	104686
Blackheddon -	135 57 57	63872	Warlaw Bank Barrow -	. . .	
Windmill near Sunderland Point -	. . .		Mordington Hill -	52 55 56	35458
Mordington Hill -	25 21 57	110832	Blackheddon -	31 1 59	54881
Blackheddon -	123 46 7	57117	Norham Castle -	. . .	
Flagstaff on the West Staples -	. . .		Mordington Hill -	9 50 2	38081
Mordington Hill -	29 37 47	112778	Blackheddon -	11 53 40	31555
Blackheddon -	117 59 18	63141	North Scramerston Wind mill -	. . .	
Low Building on one of the Staples -	. . .		Mordington Hill -	7 26 4	36080
Mordington Hill -	30 8 3	111679	Blackheddon -	8 8 38	32955
Blackheddon -	116 41 25	62752	South Scramerston Wind mill -	. . .	
East Staples Lighthouse -	. . .		Mordington Hill -	10 2 36	32997
Mordington Hill -	21 24 35	79483	Blackheddon -	9 6 16	36366
Blackheddon -	100 55 24	29550	Middle Scramerston Wind mill -	. . .	
Beacon Staff at Old Law -	. . .		Mordington Hill -	83 13 12	97438
Mordington Hill -	23 52 42	77753	Blackheddon -	59 32 36	112245
Blackheddon -	94 45 48	31728	Southmost Turret of Hume Castle -	. . .	
Flagstaff on Holy Island Castle -	. . .		Mordington Hill -	11 20 15	37762
Mordington Hill -	22 18 23	65096	Blackheddon -	13 22 37	32161
Blackheddon -	71 41 30	26022	Green's Windmill -	. . .	
Windmill on Holy Island -	. . .		Mordington Hill -	30 22 10	48566
Mordington Hill -	4 16 50	63428	Blackheddon -	20 19 56	106491
Blackheddon -	42 36 2	6994	Buncle Edge Clump -	. . .	
Kyloe Church Tower -	. . .		Mordington Hill -	94 49 47	35647
			Blackheddon -	26 26 58	79748
			Blackadder Tower -	. . .	

Names of Stations and intersected Objects.	Observed Angles.	Distance in Feet.	Names of Stations and intersected Objects.	Observed Angles.	Distances in Feet.
Mordington Hill -	80 45 2	32341	Lumsdane Hill -	80 45 2	32143
Blackheddon -	26 47 44	70808	Blackheddon -	11 48 59	104682
Dyket Head Windmill			Warlaw Bank Barrow		
Mordington Hill -	66 24 3	31943	Lumsdane Hill -	20 40 42	68799
Blackheddon -	27 45 3	62850	Blackheddon -	26 16 35	54877
Horndean Windmill -			Norham Castle -		
Mordington Hill -	114 44 36	25425	Lumsdane Hill -	68 57 16	306 7
Blackheddon -	16 17 7	82345	Blackheddon -	15 34 36	106402
Harelaw Barn -			Buncle Edge Clump -		
Mordington Hill -	104 17 48	56861	Says Law from Blackheddon	170637.4 feet.	
Blackheddon -	33 45 27	99159	Says Law	9 43 16	93818
Dunse Spire -			Blackheddon	11 27 24	79755
Mordington Hill -	67 4 25	52565	Blackadder Tower	.	.
Blackheddon -	45 17 29	68120	Says Law -	14 48 1	140121
South Gable of Simprin Barn -			Blackheddon	45 30 27	50136
Mordington Hill -	60 47 28	38355	Berwick upon Tweed Spire	.	.
Blackheddon -	33 58 25	50909	Says Law	21 54 3	119591
Lady Kirk Spire -			Blackheddon	36 46 39	74506
Mordington Hill -	94 49 35	34449	Signal Staff on Habchester Hill	.	.
Blackheddon -	30 57 21	34015	Lumsdane Hill from Mordington Hill	45764.1 ft	
Whitclaw Windmill -			Lumsdane Hill	27 47 45	68793
Mordington Hill -	84 17	40773	Mordington Hill	115 11 36	35452
Blackheddon -	32 14	76061	Norham Castle		
Longridge Windmill -			Lumsdane Hill -	13 42 0	36781
Mordington Hill -	59 41 54	34380	Mordington Hill	53 23 8	25444
Blackheddon -	30 10 30	59055	Hartlaw Barn	.	.
New Lady Kirk Windmill			Lumsdane Hill	88 26 6	44721
Lumsdane Hill from Blackheddon	113573.5 ft		Mordington Hill	45 6 14	63108
Lumsdane Hill -	19 46 17	156974	Lockburn Law -		
Blackheddon -	122 44 39	63131	Lumsdane Hill -	24 9 41	37104
Low Building on one of the Staples -			Mordington Hill	51 53 35	19301
Lumsdane Hill -	20 5 50	155796	Edington Hill Threshing Machine -		
Blackheddon -	121 26 47	62750	Lumsdane Hill -	98 39 33	92443
East Staples Lighthouse	.	.	Mordington Hill	56 51 12	109151
Lumsdane Hill -	27 31 24	153827	Twinlaw Cairns	.	.
Blackheddon -	107 48 55	74665	Says Law from Mordington Hill	124008.6 ft.	
Rock on the West End of the Cheviot -	.	.	Says Law	34 47 40	26715
			Mordington Hill	8 29 40	103203
			Spartleton Hill Staff -	.	.

Names of Stations and intersected Objects	Angles in Computation	Distances in Feet	Names of Stations and intersected Objects	Angles in Computation	Distances in Feet
Haddon Beacon	48° 51' 46"	57770	Brompton Ralph	8° 33' 45"	81251
Sampford	59° 11' 40"	50173	Sampford	152° 5' 23"	25843
Newts Down	71° 56' 34"		Kentisbeare	19° 20' 52"	
Bagborough	53° 21' 11"	103895	Sampford	24° 28' 6"	24321
Haddon Beacon	101° 0' 41"	57273	Kentisbeare	69° 47' 35"	10734
Newts Down	12° 20' 38"		Gaddon Hill	85° 44' 19"	
Haddon Beacon	3° 8' 21"	76622	Sampford	23° 25' 31"	5911
Newts Down	167° 43' 32"	19737	Gaddon Hill	7° 5' 19"	19013
Christcross	9° 8'		Culmstock	119° 29' 10"	
Newts Down	170° 20' 0"	50165	Culmstock	21° 52' 11"	19913
Christcross	13° 50' 59"	62159	Gaddon Hill	73° 3' 5"	10737
Sampford	15° 49' 1"		Kentisbeare	69° 29' 11"	
Newts Down	89° 27' 15"	4174	Sampford	2° 52' 43"	32337
Christcross	64° 46' 45"	45400	Kentisbeare	160° 54' 32"	5031
Kentisbeare	25° 46' 0"		Wherry Farm	10° 25' 45"	
Newts Down	24° 15' 51"	64448	Sampford	2° 10' 25"	34017
Christcross	145° 49' 56"	47157	Wherry Farm	112° 23' 13"	2115
Whitestone	9° 51' 13"		Upcot Pen	35° 20' 23"	
Staple Hill	78° 7' 42"	26558	Sampford	20° 25' 37"	47920
Castlincreach	79° 6' 49"	26466	Upcot Pen	123° 1' 16"	19947
Yartcombe	22° 45' 29"		Woolford Lodge	30° 33' 7"	
Staple Hill	23° 37' 32"	46747	Upcot Pen	28° 3' 38"	12707
Yartcombe	139° 58' 27"	24815	Woolford Lodge	31° 23' 59"	10504
Dumpdon	25° 24'		Hembury Fort	117° 32' 23"	
Bagborough	20° 10' 4"	102270	Hembury Fort	66° 44' 50"	21536
Staple Hill	131° 1' 27"	46737	Woolford Lodge	83° 59' 55"	19005
Dumpdon	28° 48' 29"		North Ottery Moor	22° 15' 15"	
Dumpdon	52° 50' 18"	25508	Hembury Fort	17° 8' 16"	37739
Yartcombe	65° 10' 25"	22378	North Ottery Moor	143° 41' 5"	19331
Harner Hill	61° 59' 17"		South Ottery Moor	19° 9' 52"	
Dumpdon	9° 51' 6"	16255	North Ottery Moor	53° 21' 46"	23850
Harner Hill	17° 19' 48"	9892	South Ottery Moor	75° 5' 0"	19806
Stockland	53° 49' 0"		West Ottery Moor	51° 33' 14"	
Dumpdon	5° 50' 47"	25599	Whitestone	113° 59' 28"	49762
Harner Hill	67° 20' 35"	2712	Christcross	34° 0' 15"	81291
Beacon Hill	126° 38' 37"		Obelisk on Haddon	32° 0' 17"	
Dumpdon	150° 33' 12"	10528	Whitestone	11° 15' 12"	31693
Harner Hill	8° 29' 21"	35060	Haddon Old Station	150° 25' 30"	19675
Combe-Rowleigh	20° 57' 27"		Haddon Obelisk	18° 19' 18"	

Names of Stations and inter- sected Objects.	Angles for Computation	Distances in Feet	Names of Stations and inter- sected Objects.	Angles for Computation	Distances in Feet.
Whitestone -	10 18 56	32252	Whitestone -	37 48	22294
Haldon Old Station	134 34 18	9867	Christcross - -	24 49 12	32551
Haldon New Station	35 6 4		Rock Barton -	117 22 48	
Haldon Old Station	39 35 40	34430	Haldon New Station	22 7 48	10540
Haldon New Station	127 12 46	27554	Little Haldon -	12 34 57	18227
Little Haldon -	13 11 34		Haldon Obelisk -	145 17 1	
Haldon New Station	28 47 14	29532	Haldon Obelisk -	18 58 50	18854
Whitestone -	16 46 1	19519	Little Haldon -	86 16 40	6145
Exeter Cathedral -	104 26 45		Holcomb Down -	74 44 30	
Haldon Old Station	96 43 8	26700			
Haldon New Station	63 53 58	29528			
Exeter Cathedral -	19 22 54				

ART. II. *First Class of Secondary Triangles for the Survey of the North of Devon. Plate III.*

The Sides of the Great Triangles used as Base Lines in calculating the Sides of the Secondary Triangles, are the following :

Distance from Black Down to	St. Stephen's Down	62508 feet.
	Kit Hill -	53128
	Butterton Hill -	89146
Cawsand Beacon to	Rippin Tor	64020
	Great Haldon -	84116
Rippin Tor to	Great Haldon	55628
Dunkery Beacon from Haldon Beacon		48139

Black Down -	66 41 56	48290	Black Down	30 56 8	55913
St. Stephen's Down	45 34 40	62162	Butterton Hill	94 1 1	108495
Bradbury Castle	67 35 24		Cawsand Beacon	55 2 31	
Bradbury Castle	19 59 11	94758	Black Down	59 40 9	55903
St. Stephen's Down	129 42 2	42095	Bradbury Castle	07 25 34	52255
Warbstow Beacon	30 18 47		Cawsand Beacon	52 54 17	
Kit Hill -	61 47 48	100969	Cawsand Beacon	41 23 3	84116
Black Down -	86 31 15	89140	Rippin Tor	29 3 17	55628
Butterton Hill	31 40 57		Great Haldon	49 33 5	
Cawsand Beacon	31 35 32	108495	Rippin Tor -	4 33 10	51787
Rippin Tor -	117 24 8	62551	Great Haldon	76 52 4	4466
Butterton Hill -			Palk's Tower	98 34 1	
Cawsand Beacon	86 3 10	55012	Cawsand Beacon	58 10 13	82218
Rippin Tor -	42 49 51	2048	Bradbury Castle	58 52 10	90000
Black Down -	51 6 59		Beacon Moor	32 57 34	

Names of Stations and intersected Objects.	Observed Angles.	Distances in Feet.	Names of Stations and intersected Objects.	Observed Angles.
Cawsand Beacon -	90 3 31	80171	St. Stephen's -	66 28 33
Beacon Moor -	44 11 57	114895	Bradbury Castle -	58 31 27
Palk's Tower -	45 41 31		Pancras Week -	55 0 0
Cawsand Beacon -	63 52 50	68487	St. Stephen's -	63 13 21
Great Haldon -	48 43 50	81815	Warbstow Beacon -	77 23 23
West Murchard -	07 23 20		Pancras Week -	39 23 10
Great Haldon -	33 57	78537	St. Stephen's -	72 36 33
Cawsand Beacon -	04 58	54497	Bradbury Castle -	50 19 3
Mary Down -	76 3		Bridgerule -	57 4 24
Bradbury Castle -	41 24 36	70241	St. Stephen's -	57 5 19
Beacon Moor -	47 0 22	83522	Warbstow Beacon -	70 51 41
Spreyton Steeple -	91 35		Bridgerule -	40 0 0
Cawsand Beacon -	42 18 15	50492	St. Stephen's -	54 53 59
Bradbury Castle -	66 18 30	37112	Warbstow Beacon -	95 41 14
Hatherleigh -	71 23 18		Kilhampton -	49 24 47
Bradbury Castle -	17 27	70256	Warbstow Beacon -	40 54 10
Cawsand Beacon -	125 0 30	25735	Beacon Moor, H. -	64 25 00
Spreyton Steeple -	37 31 55		Kilhampton -	74 59 54
Bradbury Castle -	51 21 47	63475	Warbstow Beacon -	62 4 34
Cawsand Beacon -		35	St. Stephen's -	77 47 17
Winkley -	52 38		Holsworthy Steeple -	59 41 13
Bradbury Castle -	4 30 26	63476	St. Stephen's -	13 26 28
Beacon Moor -	8 40 5	33098	Beacon Moor, H. -	72 29 53
Winkley -	166 49 20		Holsworthy -	94 3 39
Bradbury Castle -	36 40 59	86419	Warbstow Beacon -	67 14 8
Beacon Moor -	62 39 40	58120	St. Stephen's -	67 33 18
Bellevue -	80 39 41		Pyeworthy -	45 12 34
Bradbury Castle -	18 32 27	65884	St. Stephen's -	23 30 6
Bellevue -	41 10	31823	Beacon Moor -	63 1 2
Langtree -	20 17 13		Pyeworthy -	93 22 45
Bradbury Castle -	34 33	29297	St. Stephen's -	62 8 36
Hatherleigh -	51 59 53	21093	Bradbury Castle -	52 51 51
High Hampton Steeple -	93 26 16		Pyeworthy -	64 59 33
Bradbury Castle -	69 29 15	45845	St. Stephen's -	14 23 18
St. Stephen's -	38 38 34	61762	Holsworthy -	124 24 10
Beacon Moor Holsworthy -	71 52		Pancras Week -	61 12 12
Warbstow Beacon -	54 46 58	74975	Pancras Week -	104 13 40
St. Stephen's -	51 4 0	61262	Holsworthy -	52 18 20
Beacon Moor, Holsworthy -	34 9 2		Week St. Mary -	23 28 0

Names of Stations and inter- sected Objects.	Observed Angles	Distances in feet.	Names of Stations and inter- sected Objects.	Observed Angles.	Distances in Feet.
Pancras Week - - -	63 11 50	23014	Beacon Moor - - -	81 56	53112
Week St. Mary - - -	42 13 10	30568	Span Head - - -	43 19	83849
Stamford - - -	74 35 01		Belleview - - -	54 43	
Bradbury Castle - - -	70 53 58	69577	Span Head - - -	29 45 10	76552
Belleview - - -	45 55 40	91511	North Molton Ridge - -	140 4 36	59195
Pancras Week - - -	63 10 22		Withendge Spire - - -	10 10 14	
Dunkery Beacon - - -	79 3 5	47309	Beacon Moor - - -	31 50 25	57328
Haddon Beacon - - -	49 32 18	60943	Cotton Hill - - -	75 20 37	31674
North Molton Ridge -	51 17 37		Belleview - - -	72 42 57	
Dunkery Beacon - - -	22 34 57	54421	North Molton Ridge - -	36 12 55	65326
North Molton Ridge -	00 4 14	21063	South Molton Steeple -	120 5	41644
Span Head - - -	52 23 42		Cotton Hill - - -	23 41 14	
Span Head - - -	22 51 11	79820	South Molton - - -	28 0 22	63157
North Molton Ridge -	149 22 5	60951	Cotton Hill - - -	110 32 38	31665
Haddon Beacon - - -	7 13 44		Belleview - - -	41 27	
North Molton Ridge -	57 10 7	30357	Beacon Moor - - -	121 4 34	114917
Span Head - - -	57 10 6	30043	North Molton Ridge - -	39 22 0	155176
South Molton - - -	35 32 14		Palk's Tower - - -	19 33 20	
Span Head - - -	57 53 13	60131	Beacon Moor - - -	83 49 33	114918
North Molton Ridge -	104 54 21	60549	Haddon Beacon - - -	53 29 29	112140
Beacon Moor Churchhigh	17 7 24		Palk's Tower - - -	42 10 53	
North Molton Ridge -	105 43 34	60640	North Molton Ridge - -	43 53 15	105599
Haddon Beacon - - -	37 1 41	90225	Beacon Moor - - -	102 7 0	70505
Beacon Moor Ch. - - -	37 14 42		Chatterbox - - -	33 14 36	
Span Head - - -	143 30 30	24311	North Molton Ridge - -	72 53 9	66617
Beacon Moor - - -	9 15 35	89647	Beacon Moor - - -	55 1 25	33319
Paracombe - - -	27 13 42		Endbridge Steeple - -	67 5 20	
North Molton Ridge -	11 51 8	44584	North Molton Ridge - -	26 9 17	81924
Span Head - - -	158 31 0	21312	Beacon Moor - - -	109 1 40	30542
Paracombe - - -	9 57 1		W. St. Mordard - - -	44 12 37	
North Molton Ridge -	62 27 50	65374	North Molton Ridge - -	31 32 27	73647
Paracombe - - -	76 5 10	59721	Beacon Moor - - -	83 52 43	49150
Cotton Hill - - -	41 27 0		Puddington - - -	54 54 50	
Span Head - - -	111 27 33	54607	Cotton Hill - - -	93 20 0	79228
North Molton Ridge -	50 56 42	65371	Paracombe - - -	20 1 2	69553
Cotton Hill - - -	17 25 45		Heanton Steeple - - -	53 15 10	
Beacon Moor - - -	50 6 41	57329	Cotton Hill - - -	60 50 0	32919
Span Head - - -	53 29 18	54613	Beacon Moor - - -	45 31 0	40084
Cotton Hill - - -	70 11 1		Haddon - - -	43 44 0	

Names of Stations and inter- sected Objects	Angles for Computation	Distances in Feet	Names of Stations and inter- sected Objects	Angles for Computation	Distances in Feet.
Heanton -	34 57	10475	Span Head	79 16 40	96424
Cotton Hill -	13 43 40	25117	Parracombe	86 9 7	94255
Fremington Steeple	131 19 20		Northam	14 34 13	
Beacon Moor -	126 45	38346	Bellevue	100 15 30	34271
Span Head -	18 27	97067	Span Head	20 54 30	96426
West Mouchard	34 47 40		Northam	58 50 0	
Fremington -	93 2	28430	Bellevue	44 38 0	44964
Cotton Hill -	46 50 30	38920	Northam	84 40 0	31700
Swinham Down -	40 7 30		Parkham	50 45 0	
Cotton Hill -	34 30 36	60972	Parkham	44 39	28201
Parracombe -	74 39 16	35841	Bellevue	50 31	31825
Hangman Hill -	70 50 8		Laugtree	96 50	
Hangman Hill -	34 42 40	38566	Cotton Hill	40 53 C	27052
Parracombe -	79 22 50	22344	Bellevue	57 38	20993
Bratton Down -	65 54 30		Harwood	61 24	
Bratton Down -	24 4 0	35831	Bellevue	69 17 C	44977
Hangman Hill -	05 11 0	15739	Harwood	83 6 C	4-370
Ecry Down -	87 45 0		Parkham	27 37 C	
Hangman Hill -	13 33	851			
Bury Down -	147 11	176			
Hewish Down -	19 16				

*AET. III. First Class of Secondary Triangles for the Survey of Dartmoor Forest, and the South of Devon. Plate III.*

The Sides of the Great Triangles used as Base Lines in this Survey are the following, viz.

Little Haldon to	{ Rippin Tor	55 928 feet.
	{ Furiland	72776
Rippin Tor to	{ Butterton Hill	62951
	{ Cawsand Beacon	63709
Bolt Head to	{ Butterton Hill	72479
Rippin Tor to	{ Sir R. Palk's Tower, Haldon	54788
	{ Chudleigh Steeple	41471

Rippin Tor Old Station	106 45 0	235	Rippin Tor Old Station	66 15 0	232
Little Haldon	0 13 0	51035	Palk's Tower	0 13 20	54695
Rippin Tor New Station	73 1 20		Rippin Tor New Station	113 31 40	
Rippin Tor New Station	44 8 20	32774	Rippin Tor New Station	84 44 10	32570
Denbury	101 5 40	39781	Palk's Tower	34 5 50	61037
Little Haldon	34 46 0		Denbury	63 10 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Rippon Tor Old Station	87 54	233	Morleigh Camp	72 10	28227
Chudleigh Steeple	0 19	41463	Butterton Hill	35 58 5	45737
Rippon Tor New Station	91 46 42		Church Stowe Steeple	71 51 1	
Rippon Tor New Station	63 0 10	32574	Horner Down	104 50 3	24616
Chudleigh Steeple	47 24 50	39421	Rippon Tor	17 40 2	81566
Denbury	69 35		Higher East Close	57 29 1	
Furland	71 56 33	68727	Morleigh Camp	111 28 3	25610
Little Haldon	51 46 15	83180	Horner Down	50 40 1	21287
Brent Ruins	56 17		Higher East Close	17 51 2	
Rippon Tor New Station	106 15	47739	Horner Down	60 46 5	39520
Little Haldon	33 26 1	83181	Butterton Hill	60 39 3	39566
Brent Ruins	40 18 5		Bigbury Spire	58 33 4	
Rippon Tor	62 1 30	32567	Church Stowe	31 0	27465
Brent Ruins	41 32 30	43371	Marlborough	103 46	14564
Denbury	76 26		Portlemouth	45 14	
Rippon Tor Old Station	135 34 0	232	Church Stowe	23 7 5	16380
Butterton Hill	0 8 50	63117	Portlemouth	27 25	13974
Rippon Tor New Station	44 17 10		Charleton Steeple	129 27 10	
Rippon Tor New Station	32 47 36	71556	Church Stowe	66 25 5	14702
Butterton Hill	85 6 14	38681	Portlemouth	31 58 2	25449
Horner Down	62 6 10		Buckland, Tout Saints	81 35 50	
Horner Down	24 26 40	50847	Church Stowe	29 39 10	8729
Rippon Tor	40 14 15	32573	Portlemouth	12 15 20	20349
Denbury	115 19 5		Kingsbridge Spire	38 5 30	
Horner Down	142 23 25	8438	Portlemouth	40 15 0	18899
Butterton Hill	6 28 35	45656	Church Stowe	48 6 50	17867
Morleigh Camp	31 8 0		Marlborough Station	96 38 10	
Rippon Tor	24 30	52757	Marlborough Station	65 22 20	26664
Denbury	125 12	26774	Portlemouth	72 11 2	25459
Totness Steeple	30 18		Buckland, Tout Saints	42 26 20	
Totness	64 40 20	19141	Marlborough Station	73 5 50	13837
Denbury	42 57 0	25391	Portlemouth	40 40 10	19914
Marldon Beacon	72 22 40		West Allington Steeple	65 14 0	
Totness	26 52 20	17172	West Allington	104 54 50	9149
Marldon Beacon	63 40 30	8657	Marlborough	29 18 10	18657
Willman Hill	89 20 10		Charleton Steeple	45 47 0	
Horner Down	80 54 30	31270	Portlemouth	90 33 10	11957
Butterton Hill	42 27 50	45735	Church Stowe	23 26 10	30063
Church Stowe Steeple	56 37 40		South Pool Station	66 0 40	



Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Portlemouth - -	10 57 10	11159	Butterton Hill - -	110 53 40	23356
South Pool Station - -	64 47 50	2345	East Down Beacon - -	59 22 0	25359
South Pool Steeple - -	104 20 0		Modbury Spire - -	9 44 20	
South Pool Station - -	69 58 20	3089	Holland Hill - -	102 0 0	11314
Portlemouth - -	14 54 40	11279	Butterton Hill - -	28 16 14	23365
Chivelstone Station - -	95 7 0		Modbury Spire - -	49 43 40	
Chivelstone Station - -	12 0 10	13814	Butterton Hill - -	74 19 0	12020
Portlemouth - -	127 51 0	3638	East Beacon - -	83 23 0	11650
Salcombe Chapel - -	40 8 50		Ugborough Spire - -	22 18 0	
Portlemouth - -	93 14 30	20342	Holland Hill - -	39 41 0	17037
Chivelstone Station - -	58 32 0	23811	Butterton Hill - -	64 19 24	12021
Kingsbridge Spire - -	28 13 20		Ugborough Spire - -	75 49 30	
Wallaton Cross - -	54 32 50	9973	Butterton Hill - -	11 50 20	19635
Morleigh - -	56 0 50	5728	East Beacon - -	12 27 50	10501
Black-Auton Steeple - -	69 26 20		North Marsh - -	10 11 50	
Black Down - -	36 4 50	12182	Morleigh - -	54 58 0	
Church Stowe - -	34 25 50	12699	Butterton Hill - -	51 10 50	19577
Woodleigh Steeple - -	109 31 20		Bighury - -	70 20 5	
Church Stowe - -	23 35 0	005	Morleigh - -	89 38 30	15107
Woodleigh - -	42 42 0	5500	Butterton Hill - -	14 49 50	63979
Loddeswell Steeple - -	113 10 0		Modbury - -	15 31 40	
Marlborough Station - -	67 43 2	1311	Marlborough Station - -	91 31 30	49978
Beacon Hill - -	69 21 30	1700	Butterton Hill - -	51 18 10	64006
Church Stowe Steeple - -	42 55 1		Modbury - -	47 9 50	
Marlborough Station - -	4 47 20	10421	Butterton Hill - -	16 27 50	36175
Beacon Hill - -	17 59 50	2748	Modbury - -	64 34 20	11552
Charlestone Steeple - -	15 10 50		Modbury - -	98 57 50	
Marlborough Station - -	56 24 10	1518	Morleigh - -	108 18 20	44626
Beacon Hill - -	4 42 30	11314	Butterton Hill - -	35 22 30	73183
South Hill - -	159 13 20		Portlemouth - -	56 19 10	
Butterton Hill - -	8 9 24	17629	Butterton Hill - -	35 15 30	73175
Holland Hill - -	72 46 50	2619	Kingsbridge Steeple - -	119 10 0	48374
Beacon Park Station - -	99 3 46		Portlemouth - -	25 24 30	
Holland Hill - -	124 17 0	22405	Butterton Hill - -	16 1 40	41189
Beacon Park - -	19 36 30	2006	Bighury - -	90 6 30	11572
Cornwood Steeple - -	5 37 30		Station above Kingston - -	73 51 50	
Holland Hill - -	20 20 50	1355	Station above Kingston - -	121 14 10	32074
Beacon Park - -	114 8 20	1230	Butterton Hill - -	25 22 30	63996
Kingston Steeple - -	44 20 50		Modbury - -	33 23 20	

Names of Stations and intersected Objects.	Angles for Calculation.	Distances in feet.	Names of Stations and intersected Objects.	Angles for Calculation.	Distances in feet.
Station above Kingston	114 18 40	45858	Butterton Hill	94 27 10	18219
Butterton Hill	34 49 40	73176	Horner Down	24 22 20	44017
Portsmouth	30 51 40		Holland Hill	11 10 3	
Bolt Head	19 26 20	82246	Butterton Hill	59 19 3	18226
Butterton Hill	100 30 40	27839	Hemerdon Ball	40 12 5	24277
Hemerdon Ball	60 3 0		Holland Hill	80 28 0	
Hemerdon Ball	115 11 0	13545	Butterton Hill	0 8 50	63117
Butterton Hill	11 13 40	39720	Rippon Tor Old Station	135 34 0	232
Boringdon	23 35 20		Rippon Tor New Station	11 17 10	
Butterton Hill	31 28 2	57	East Beacon	136 46 0	4592
Gonnor Down	101 11 30	2020	Butterton Hill	40 21	50087
Gonnor Down	47 20 0		Rippon Tor New Station	71 40	
Butterton Hill	50 23 57	52994	Station above Pen Beacon	82 25 0	27834
Gonnor Down	51 50 10	41230	Hemerdon Ball	58 52 10	2222
Cawsand Barrow	11 10 0		East Beacon	33 42 50	
Butterton Hill		276	Butterton Hill	161 29 50	4591
Butterton Hill	31	37039	Hemerdon Ball	2 35 30	22226
Station South of Yeal			East Beacon	15 54 40	
Boringdon			Rippon Tor	15 12 20	34229
Hemerdon Ball			Rippon Tor	40 47 40	12317
Newton Down			Rippon Tor		
Butterton Hill			Rippon Tor	91 37 0	
Hemerdon Ball			Rippon Tor	21 26 0	50417
Station above Pen Beacon	23 57 0		Hamilton Down	66 57 0	
Hemerdon Ball	153 22 0		Rippon Tor	66 34 0	21726
Station above Pen Beacon	10 20 0		East Beacon	79 33 0	20270
Boringdon	10 20 0		Hamilton Down	33 53 0	
Boringdon	133 5 20		Cawsand Beacon	0 3 57	63729
Station above Pen Beacon	10 50 40		Rippon Tor Old Station	18 20 33	233
Newton Down	20 1 20		Rippon Tor New Station	161 35 30	
Boringdon	20 1 20		Rippon Tor New Station	0 34 40	63615
Newton Down	98 5 0		Cawsand Beacon	73 43 30	6362
Station South of Yeal			Cawsand Beacon Barrow	103 41 50	
Boringdon			Rippon Tor New Station	92 7 50	35006
Gonnor Down	20 1 20		Cawsand Beacon Barrow	28 43 10	24018
Newton Down	101 57 0		Ryder's Hill	59 9 0	
Gonnor Down	103 38 0	4733	Rippon Tor New Station	29 33 30	54024
Newton Down	26 33 30	10289	Cawsand Beacon Barrow	58 2 30	31400
West Down	49 48 30		Cut Hill	02 24 0	

Names of Stations and inter- sected Objects	Angles for Calculation.	Distances in Feet	Names of Stations and inter- sected objects.	Angles for Calculation	Distances in Feet.
	° ' "			° ' "	
Rippon Tor New Station	62 38 30	35574	Black Down - -	105 51 30	18584
Cut Hill - -	39 59 10	49167	Brent Tor - -	48 10 30	23989
Ryder's Hill - -	77 22 20		Cocks Tor - -	25 58 0	
Rippon Tor - -	32 15 50	55202	Kit Hill New Station -	26 4 0	53497
Ryder's Hill - -	110 35 40	31480	Brent Tor - -	101 29 0	23987
Hessary Tor - -	37 8 30		Cocks Tor - -	52 27 0	
Rippon Tor - -	30 23 30	54038	Cut Hill - -	33 1 30	30882
Hessary Tor - -	72 34 30	28658	Hessary Tor - -	80 40 20	17056
Cut Hill - -	77 2 0		Cocks Tor - -	66 18 10	
Ryder's Hill - -	33 17 30	49175	Ryder's Hill - -	27 34 0	33941
Hessary Tor - -	109 37 30	28657	Hessary Tor - -	84 56 0	15768
Cut Hill - -	37 5 0		Leather Tor - -	67 30 0	
Cut Hill - -	36 29 30	25005	Hessary Tor - -	84 41 30	15778
Cawsand Beacon Barrow	52 45 10	18681	Cocks Tor - -	45 12 30	22137
Tes Tor - -	90 45 20		Leather Tor - -	50 6 0	
Tes Tor - -	1 11 10	19220	Cocks Tor - -	140 58 0	18577
Cawsand Beacon Barrow	143 21 10	666	Hessary Tor - -	20 23 0	33589
Cawsand Beacon -	35 27 40		Black Down - -	18 39 0	
Cawsand Beacon -	43 16 0	15442	Black Down - -	53 27 20	34732
Tes Tor - -	53 1 40	13253	Cocks Tor - -	94 18 20	27983
Oakhampton Park -	83 42 20		Morwell Down - -	32 14 20	
Cawsand Beacon - -	102 27 0	19979	Black Down - -	71 58 10	34734
Tes Tor - -	39 40 0	30564	Hessary Tor - -	55 20 10	40155
Castor Rock - -	37 53 0		Morwell Down - -	52 41 40	
Kit Hill Old Station -	38 3 20	181	Cocks Tor - -	48 28 0	60811
Brent Tor - -	0 8 52	43279	Kit Hill - -	73 51 10	47391
Kit Hill New Station -	141 47 48		St. Budeaux - -	57 40 50	
Black Down - -	0 7 46	53004	Cocks Tor - -	95 26 0	22150
Kit Hill Old Station -	43 58 4	180	Kit Hill - -	21 38 0	59811
Kit Hill New Station -	135 54 10		Leather Tor - -	62 56 0	
Black Down - -	81 28 0	18577	Kit Hill - -	52 7 0	47394
Kit Hill New Station	20 5 0	53500	Leather Tor - -	50 37 0	48397
Cocks Tor - -	78 27 0		St. Budeaux - -	77 16 0	
St. Stephen's Down -	5 37 20	53167			
Black Down - -	28 29 29	10919			
Brent Tor - -	145 53 11				

ART. IV. *Second Class of Triangles for the interior Survey of Part of Somersetshire, of Devonshire, and Part of Cornwall.* Plate III.

Names of Stations and intersected Objects.	Angles for Calculation.			Distances in Feet.	Names of Stations and intersected Objects.	Angles for Calculation.			Distances in Feet.
	°	'	"			°	'	"	
Huntspill Steeple -	14	4	0	30206	Huntspill Steeple -	73	34	0	16414
Brent Knoll -	136	32	0	10672	Cannington -	37	22	0	25939
Lymsham Steeple -	29	24	0		Puriton Mill -	69	4	0	
Huntspill Steeple -	42	14	0	23214	Huntspill Steeple -	98	7	0	18938
Brent Knoll -	74	23	0	16203	Brent Knoll -	37	44	0	30636
Berrow Steeple -	63	24	0		Woolavington Steeple -	44	9	0	
Huntspill Steeple -	121	43	0	23198	Huntspill Steeple -	97	57	0	18939
Cannington -	27	47	0	42336	Cannington -	33	56	0	33601
Berrow Steeple -	30	30	0		Woolavington Steeple -	48	7	0	
Huntspill Steeple -	33	58	0	12917	Huntspill Steeple -	10	16	0	45274
Brent Knoll -	33	39	0	13024	Cannington -	157	18	0	20910
Burnham Steeple -	112	23	0		Over Stowey -	12	26	0	
Huntspill Steeple -	129	59	0	12918	Huntspill Steeple -	12	11	0	40231
Cannington -	16	26	0	34989	Cannington -	148	53	0	16429
Burnham Steeple -	33	35	0		Nether Stowey -	18	56	0	
Huntspill Steeple -	39	26	0	26110	Huntspill Steeple -	14	0	0	19904
Brent Knoll -	85	13	0	16643	Cannington -	39	0	0	7651
Mark Steeple -	55	21	0		Chimney on the north side of Mr. Evered's House -	127	0	0	
Huntspill Steeple -	156	36	0	26125	Huntspill Steeple -	149	58	0	19872
Cannington -	11	54	0	50317	Brent Knoll -	14	24	0	40034
Mark Steeple -	11	30	0		Chimney on the north side of Mr. Evered's House -	15	38	0	
Huntspill Steeple -	154	22	0	9350	Quantock -	29	39	25	28469
Brent Knoll -	7	41	0	30255	Cannington -	63	41	33	15714
Pawlet Steeple -	17	57	0		Stoke Courcy Steeple -	86	39	2	
Huntspill Steeple -	41	40	0	9350	Quantock -	33	5	1	28469
Cannington -	18	47	0	19303	Danesbury -	124	36	9	18880
Pawlet Steeple -	119	33	0		Stoke Courcy Steeple -	22	18	50	
Huntspill Steeple -	72	3	0	13354	Huntspill Steeple -	42	46	0	41126
Cannington -	31	0	0	24667	Cannington -	100	1	0	28357
Puriton Steeple -	76	57	0		North Petherton Steeple -	37	13	0	
Huntspill Steeple -	124	0	0	13343	Cannington -	31	8	0	39262
Brent Knoll -	20	52	0	31052	North Petherton Steeple -	104	30	0	20968
Puriton Steeple -	35	8	0		Weston in Zoyland Steeple -	44	22	0	
Huntspill Steeple -	122	29	0	16405					
Brent Knoll -	74	30	0	33370					
Puriton Mill -	33	1	0						

Names of Stations and intersected Objects.	Angles for Calculation.		Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.
Cannington - - -	43 2	32132	Danesbury - - -	31 48	16889
North Petherton Steeple	78 8	22616	Quantockshead - - -	119 38	10239
Chedzoy Steeple - - -	58 50	o	E. Quantockshead Steeple	48 34	o
North Petherton Steeple	26 22	22602	Crowcomb - - -	25 31	38976
Weston in Zoyland Steeple	85 55	10064	Danesbury - - -	145 2	29311
Chedzoy Steeple - - -	67 43		Stockland Steeple - - -	9 27	c
North Petherton Steeple	35 50	c 24008	Quantockshead - - -	45 54	o 35026
Weston in Zoyland Steeple	85 46	c 14190	Danesbury - - -	120 57	29329
Burrow Mount Chapel	60 15	c	Stockland Steeple - - -	13 9	
Cannington - - -	18 3	c 49316	Danesbury - - -	24	o 18293
North Petherton Steeple	110 29	o 24009	West Quantock - - -	8	o 12806
Burrow Mount Chapel	21 28		Summer House - - -	28	o
North Petherton Steeple	60 24	c 19173	Danesbury - - -	42 7	o 18282
Weston in Zoyland Steeple	56 10	c 20381	Quantockshead - - -	100 12	o 11962
East Ling Steeple - - -	63 26	o	Summer House - - -	20 41	o
North Petherton Steeple	24 25	c 19475	Danesbury - - -	56 4	c 18821
Burrow Mount Chapel	52 4	o 10207	Quantockshead - - -	8 35	c 1221
East Ling Steeple - - -	103 31	o	Little Stoke Steeple - - -	70 25	o
Cannington - - -	37 24	o 17383	Danesbury - - -	82 23	o 11729
North Petherton Steeple	36 1	c 1824	West Quantock - - -	42 8	c 17465
Enmore Steeple - - -	106 25	c	Stringston Steeple - - -	50 29	
North Petherton Steeple	140 51	c 17543	Danesbury - - -	85 6	o 11722
Weston in Zoyland Steeple	36 10	c 36075	Quantockshead - - -	54 38	o 14363
Enmore Steeple - - -	21 10	c	Stringston Steeple - - -	40 16	o
Cannington - - -	137 35	c 17396	Danesbury - - -	87 13	24433
Huntspill Steeple - - -	17 7	o 39868	West Quantock - - -	03 15	27329
Enmore Steeple - - -	25 18	c	Chimney of a white House	29 32	o
Weston in Zoyland Steeple	54 45	c 32020	Danesbury - - -	84 56	c 24117
North Petherton Steeple	84 34	c 20267	Quantockshead - - -	39	o 25346
Breech, St. Michael - - -	40 14	o	Chimney of white House	25	o
Danesbury - - -	24 5	o 9291	Danesbury - - -	17	o 7140
Crowcomb - - -	51 39	o 4049	Crowcomb - - -	00	o 6513
Quantockshead - - -	101 16	c	Crowcomb Knap - - -	109 43	o
Danesbury - - -	21 46	o 13127	Crowcomb - - -	119 5	o 33920
Crowcomb - - -	105 53	c 5163	Crowcomb Knap - - -	52 11 30	37521
West Quantock Station	53 6 30		Summer House near Net-lecomb - - -	8 43 30	
Danesbury - - -	34 5	o 16877	Crowcomb - - -	46 36	o 33892
West Quantock - - -	95 4	o 9483	St. Decuman's Steeple - - -	90 8 30	24625
E. Quantockshead Steeple	52 51	o	Summer House - - -	43 15 30	

Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.
Crowcomb - - -	114 34 0	36769	Black Hill - - -	144 48 3	12838
Crowcomb Knap - - -	56 54 0	39918	Grabbist - - -	13 35 0	31504
Clump of Trees near Nettlecomb - - -	8 32 0		Barrow near Luxborough - - -	21 36 30	
Crowcomb - - -	51 7 0	36769	Blackhill - - -	59 0 0	5381
St. Decuman's Steeple - - -	89 42 40	28622	Lype Hill - - -	22 4 30	12273
Clump of Trees - - -	39 10 20		Barrow on Croydon Hill - - -	98 55 30	
Crowcomb - - -	123 52 0	24 20	Lype Hill - - -	36 59 0	12270
Crowcomb Knap - - -	45 20 0	28800	Grabbist - - -	28 36 0	15420
Tree near Nettlecomb - - -	10 48 0		Barrow on Croydon Hill - - -	114 25 0	
Crowcomb - - -	41 49 0	24720	Blackhill - - -	106 3 30	27837
St. Decuman's Steeple - - -	73 45 20	17167	Grabbist - - -	43 52 0	38603
Tree - - -	64 20 40		St. Decuman's Steeple - - -	30 4 30	
Brompton Ralph - - -	36 2 17	30155	St. Decuman's Steeple - - -	129 27 0	23226
Crowcomb - - -	84 43 22	17817	Blackhill - - -	22 50 0	46216
Quantock new Station - - -	59 11 21		Crowcomb - - -	27 43 0	
Quantock new Station - - -	92 50 0	15118	Lype Hill - - -	14 28 0	37177
Crowcomb - - -	37 7 30	23931	Grabbist - - -	143 44 0	15700
Lydiard St. Lawrence - - -	48 2 30		North Hill - - -	21 48 0	
Quantock new Station - - -	16 1 0	29348	Grabbist - - -	9 25 0	16730
Crowcomb - - -	141 14 0	12712	North Hill - - -	100 22 0	2853
Stanford Bret Steeple - - -	42 45 0		South Station on North Hill - - -	64 13 0	
Brompton Ralph - - -	137 30 0	33288	Grabbist - - -	4 8 0	17124
Quantock new Station - - -	22 21 0	59141	North Hill - - -	138 10 0	1850
Blackhill - - -	20 9 0		North Station on North Hill - - -	37 42 0	
Brompton Ralph - - -	59 3 0	33278	North Hill - - -	31 47 0	1851
Haddon Beacon - - -	51 30 0	36466	South Station - - -	37 19 0	1608
Blackhill - - -	69 27 0		North Station - - -	110 54 0	
Haddon Beacon - - -	20 35 0	28127	Lype Hill - - -	18 52 0	37036
Black Hill - - -	44 10 0	14145	Grabbist Hill - - -	134 19 0	16729
Lype Hill - - -	115 11 0		South Station - - -	26 49 0	
Black Hill - - -	83 53 30	20131	North Station - - -	36 8 0	10040
Lype Hill - - -	59 3 0	23339	South Station - - -	143 23 0	8703
Grabbist Hill - - -	37 3 30		Perlock Steeple - - -	5 29 0	
Haddon Beacon - - -	101 5 0	28130	North Station - - -	130 17 0	16254
Heydon Hill - - -	42 44 0	40680	Grabbist Hill - - -	24 10 0	30287
Lype Hill - - -	36 11 0		Chimney of House on Porlock Quay - - -	25 33 0	
Blackhill - - -	60 55 0	12832			
Lype Hill - - -	54 48 30	13722			
Barrow near Luxborough - - -	64 16 30				

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects	Angles for Calculation.	Distances in Feet.
South Station -	140 33 0	15438	Haddon Beacon -	26 0 0	34176
Grabbist Hill -	18 54 0	30283	Bampton -	120 23 0	17367
Chimney of House -	20 33 0		Honiton Down -	33 37 0	
Grabbist Hill -	129 33 0	14337	Haddon Beacon -	66 48 30	18648
North Hill -	24 0 0	27179	Honiton Down -	32 35 0	31830
Dunster Gazebo -	26 27 0		Bampton Tree -	80 36 30	
Grabbist Hill -	5 49 0	14294	Haddon Beacon -	40 49 0	18648
St. Decuman's Steeple	3 24 0	24425	Bampton -	57 19 0	14482
Dunster Gazebo -	170 47 0		Bampton Tree -	81 52 0	
Black Hill -	23 36 0	24996	Tidcomb -	46 1 30	38020
Grabbist Hill -	105 30 0	10385	Haddon Beacon -	41 35 30	41217
Minchhead Steeple -	50 54 0		Stoodley Beacon -	92 23 0	
North Hill -	55 27 0	11688	Haddon Beacon -	52 46 0	32843
South Station -	111 25 0	10341	Stoodley Beacon -	50 46 30	33755
Luckham Steeple -	13 8 0		West Anstey -	76 27 30	
North Hill -	87 14 0	11694	Haddon Beacon -	70 49 0	32839
North Station -	83 43 0	11751	Bampton Tree -	75 47 0	31995
Luckham Steeple -	9 3 0		West Anstey -	33 24 0	
Grabbist Hill -	5 51 0	17966	Haddon Beacon -	18 3 0	18658
Lype Hill -	18 31 0	5766	Stoodley Beacon -	13 50 0	24179
Kippen's Cross -	155 38 0		Bampton Tree -	148 7 0	
Grabbist Hill -	20 52 0	17326	Haddon Beacon -	14 38 30	40229
Lype Hill -	40 48 0	9445	Stoodley Beacon -	77 17 0	10435
Cutcomb Steeple -	118 20 0		Small Tree on Bickham Moor -	88 4 30	
Lype Hill -	59 19 0	9444	Haddon Beacon -	38 8 0	32836
Kippen's Cross -	83 21 0	8176	Tree on Bickham Moor -	54 37 0	24870
Cutcomb Steeple -	37 20 0		West Anstey -	87 15 0	
Haddon Beacon -	101 9 0	12092	Haddon Beacon -	31 8 0	49723
Lype Hill -	21 16 30	32696	Tidcomb -	60 18 0	29596
Upton -	57 34 30		Newcot Highway -	88 34 0	
Haddon Beacon -	65 33 0	21933	Tidcomb -	14 16 0	29593
Heydon Hill -	52 22 0	25212	Stoodley Beacon -	37 59 0	11850
Bampton -	62 5 0		Newcot Highway -	127 45 0	
Haddon Beacon -	65 28 0	21927	Bampton -	48 40 0	13436
Upton -	81 29 0	20170	Honiton Down -	13 37 0	29677
Bampton -	33 3 0		Morebath Steeple -	17 43 0	
Haddon Beacon -	39 28 0	34164	Haddon Beacon -	13 59 0	35766
Upton -	123 20 0	25992	Bampton -	145 55 0	15422
Honiton Down -	17 12 0		East Freon Chimney Down -	20 6 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Haddon Beacon -	12 1 0	35745	Haddon Beacon -	41 4 0	15953
Honiton Down -	96 7 0	7485	Bampton Tree -	57 43 0	12390
Tree on Chimney Down	71 52 0		Brushford -	81 13 0	
Haddon Beacon -	92 55 30	27576	Haddon Beacon -	59 28 0	17010
Stoodley Beacon -	32 52 0	50747	Bampton Tree -	55 40 0	17742
Barn on Hill near Clay- hanger -	54 12 30		Dulverton -	64 52 0	
Haddon Beacon -	31 24 0	27552	Bampton Tree -	2 3 0	17724
Upton -	128 31 0	18347	Brushford -	173 12 0	5355
Barn -	20 5 0		Dulverton -	4 45 0	
Haddon Beacon -	95 52 30	15565	Bampton Tree -	5 33 0	18023
Stoodley Beacon -	19 53 0	45524	Dulverton -	96 25 0	1754
Tree near a Farm House	64 14 30		Dulverton Steeple -	78 2 0	
West Anstey -	70 1 30	4032	Bampton Tree -	7 36 0	17998
Stoodley Beacon -	6 40 30	32598	Brushford -	156 23 0	5942
East Anstey -	103 18 0		Dulverton Steeple -	16 1 0	
Haddon Beacon -	51 51 30	28839	West Anstey -	68 0 30	7518
Stoodley Beacon -	44 6 0	32593	East Anstey -	80 6 0	7076
East Anstey -	84 2 30		East Anstey Steeple -	31 53 30	
West Anstey -	49 31 30	14273	Haddon Beacon -	121 17 0	29348
East Anstey -	115 44 0	12052	Upton -	42 32 30	37096
Beech Tree near 12 Acre Cross -	14 44 30		Oakford Steeple -	16 10 30	
Haddon Beacon -	8 31 0	18112	Haddon Beacon -	29 30 0	6791
East Anstey -	13 47 30	11252	Upton -	28 25 0	7028
Tree in the middle of a Field near Dulverton	157 41 30		Upton Steeple -	122 5 0	
Haddon Beacon -	74 40 0	28364	Haddon Beacon -	113 5 0	10033
East Anstey -	52 2 30	34693	Heydon Hill -	18 0 0	29868
Stert Barn -	53 17 30		Brompton, Regis -	48 55 0	
Haddon Beacon -	17 26 0	27407	Haddon Beacon -	14 7 0	33561
Upton -	149 42 30	16279	Tidcomb -	18 21 0	26000
Small Tree on Layton Down -	12 51 30		Clump of Firs on a Hill between Bampton and Tiverton -	147 32 0	
Haddon Beacon -	118 35 0	27409	Haddon Beacon -	68 38 0	33503
Lype Hill -	30 16 0	47752	Upton -	90 15 0	31257
Tree on Layton Down	31 9 0		Clump of Firs -	21 7 0	
Haddon Beacon -	43 55 0	16664	Haddon Beacon -	4 26 0	33865
West Anstey -	29 1 0	23830	Tidcomb -	6 22 0	23607
Clump of Firs on Hill near Brushford -	107 4 0		Small Tree on a Hill be- tween Bampton and Ti- verton -	169 12 0	



Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Culmstock - - -	57 27 30	28024	Quantock - - -	42 38 13	76663
Sampford - - -	111 12 0	25339	Staple Hill - - -	80 14 37	52690
Ashbrittle Steeple - -	11 20 30		Lady Chatham's Obelisk	57 7 10	
Culmstock - - -	68 22 10	21771	Brompton Ralph - -	30 42 1	34409
Sampford - - -	95 57 49	20518	Quantock - - -	84 31	17650
Holcombe Rogus - -	15 40		Bishop's Lydiard - -	64 46 39	
Culmstock - - -	34 9 55	13031	Brompton Ralph - -	28 11	27429
Sampford - - -	123 38 40	8790	Quantock - - -	61 17 41	14771
White Ball Inn - -	22 11 17		Combe Florey Steeple	50 31 12	
Culmstock - - -	14 51 34	17667	Brompton Ralph - -	56 11 49	23886
Gaddon Hill - - -	66 31 42	4940	Quantock - - -	47 49 22	26783
Uffculme Steeple - -	98 36 35		Fitzhead Steeple - -	75 58 49	
Culmstock - - -	12 54 9	5711	Brompton Ralph - -	49 27 55	30106
Kentisbere - - -	5 4 19	14424	Quantock - - -	62 54 23	25701
Culmstock Steeple - -	162 1 32		Halse Steeple - - -	67 37 42	
Quantock - - -	31 59 11	47425	Brompton Ralph - -	87 22 3	20516
Staple Hill - - -	45 1 22	35513	Quantock - - -	34 2 54	36604
Wellington Steeple - -	102 59 27		Wivelcomb Steeple	58 35	
Brompton Ralph - -	69 39 13	48141	Wellington Steeple - -	133 57 0	17432
Quantock - - -	72 9 9	47419	Staple Hill - - -	14 56	49238
Wellington Steeple - -	38 11 38		Milverton Steeple - -	81 17	
Quantock - - -	18 50 25	40289	Wellington Steeple - -	34 10 0	11601
Staple Hill - - -	13 38 21	26257	Milverton Steeple - -	39 45 0	10188
St. Mary's Steeple, Taunton	157 31 14		Langford Budville - -	106 5 0	
Quantock - - -	112 58 35	40315	Wellington Steeple - -	11 45 0	6021
Brompton Ralph - -	38 17 37	59895	Milverton Steeple - -	6 4 0	11602
St. Mary's Steeple - -	28 43 44		Ninehead Steeple - -	162 11 0	
Quantock - - -	22 40 37	11340	Wellington Steeple - -	118 40	10763
Staple Hill - - -	4 33 23	55037	Milverton Steeple - -	22 41	24489
Cothelestone Lodge - -	152 46 0		Buckland Steeple - -	38 39	
Quantock - - -	99 6 6	23492	Wellington Steeple - -	68 54	24679
Staple Hill - - -	18 34 15	72835	Milverton Steeple - -	69 38	24560
Wilket Hill Summer House	62 19 39		Norton Fitzwarren - -	41 28	
Brompton Ralph - -	14 40 32	8140	Wellington Steeple - -	78 15	12535
Quantock - - -	5 2 14	23487	Milverton Steeple - -	39 31	19287
Wilket Hill Summer House	160 17 14		Bradford Steeple - -	62 14 0	
Quantock - - -	56 18 58	26793	Wellington Steeple - -	56 31	15000
Staple Hill - - -	23 50 5	55172	Milverton Steeple - -	53 48	15503
Fitzhead Steeple - -	99 50 57		Hill Farence - - -	69 41	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation	Distances in Feet.
Staple Hill - -	44 22 41	43255	Staple Hill - -	45 58 " c	6026
Castlineroach - -	124 3 44	36517	Brown Down - -	30 7 c	8634
Fivehead Steeple - -	11 33 35		Barrow on Hill - -	103 55 c	
Staple Hill - -	130 22 c	33651	Brown Down - -	60 43 c	19617
Castlineroach - -	38 28 47	41206	Barrow on Hill - -	93 13 c	17137
Norton Fitzwairn - -	11 9 18		Comb Beacon - -	26 4 c	
Staple Hill - -	39 27 17	33599	Staple Hill - -	59 30 c	14626
Castlineroach - -	125 56 33	26372	Brown Down - -	71 26 c	13294
Curry Mallet Steeple - -	14 36 10		Clump on Buckland Hill	49 4 c	
Staple Hill - -	75 17 0	16715	Brown Down - -	19 24 c	19620
Castlineroach - -	68 58 c	17320	Clump on Buckland Hill	128 39 c	8345
Thunkeer Steeple - -	35 45 c		Comb Beacon - -	31 57 c	
Staple Hill - -	59 3 56	20438	Brown Down - -	39 24 c	27397
Castlineroach - -	90 8 33	17531	Clump on Buckland Hill	114 22 c	19090
West Hatch Steeple - -	30 47 31		Snowdown - -	26 14 c	
Staple Hill - -	35 54 c	31494	Brown Down - -	20 c c	27399
Castlineroach - -	132 52 c	39366	Combe Beacon - -	123 10 30	11196
Isle Abbot's Steeple - -	11 14 c		Snowdown - -	36 49 30	
Staple Hill - -	18 52 c	36620	Combe Beacon - -	51 26 c	20387
Castlineroach - -	153 55 c	26933	Snowdown - -	95 25 30	16012
Ilton Steeple - -	7 13 c		Prize Hill - -	53 8 30	
Staple Hill - -	74 24 c	27507	Comb Beacon - -	93 37 30	17323
Castlineroach - -	83 24 c	26071	Prize Hill - -	39 55 c	27915
Thorne Falcon Steeple - -	22 12 c		Bailey Down - -	46 47 30	
Staple Hill - -	59 17 13	49272	Bailey Down - -	20 2 30	22436
Castlineroach - -	109 8 26	44840	Comb Beacon - -	112 56 30	8349
Stoke St. Gregory Steeple	11 34 21		Clump on Buckland Hill	47 1 c	
Staple Hill - -	119 1 15	26280	Snowdown - -	54 22 c	5102
Castlineroach - -	149 8 5	16745	Prize Hill - -	18 50 30	13594
Ashill Steeple - -	11 46 43		Chard Steeple - -	106 47 30	
Dumpdon - -	18 7 c	46168	Kentisbere - -	145 3 c	14490
Staple Hill - -	78 44 c	14638	Wherry Farm - -	22 18 c	17346
Clump of Firs on Buckland Hill - -	33 9 c		Hemyock - -	12 39 c	
Dumpdon - -	6 8 c	35939	Kentisbere - -	135 2 c	30044
Staple Hill - -	19 14 c	11656	Wherry Farm - -	37 17 c	35050
Brown Down - -	154 33 c		Clay-Hydon Steeple - -	7 41 c	
Dumpdon - -	7 5 c	44542	Kentisbere - -	10 1 c	30066
Staple Hill - -	65 12 c	6050	Hemyock - -	163 54 c	18858
Barrow on Hill near Ot- terford - -	107 43 c		Clay-Hydon Steeple - -	6 5 c	

Names of Stations and inter- sected Objects	Angles for Calculation	Distances in Feet	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Clay-Hydon Steeple -	28 13 0	7111	Hembury Fort -	18 14 0	22384
Hemyock -	14 57 0	13033	Upcot Pen New Station	141 29 0	11246
Barn on a Hill -	136 50 0		Kentisbere Steeple -	20 17 0	
Kentisbere -	55 33 0	25215	Kentisbere -	68 45 0	9885
Clay-Hydon Steeple -	52 46 0	26116	Wherry Farm -	71 41 30	9704
Beech Tree -	71 41 0		Kentisbere Steeple -	39 33 30	
Kentisbere -	119 14 0	47029	Wherry Farm -	60 20 30	20085
Wherry Farm -	54 12 0	50599	Upcot Pen New Station	113 26 0	19023
East Chimney of Holman Clavell -	6 34 0		Plymtree Church -	6 13 30	
Wherry Farm -	31 54 0	50600	Hembury Fort -	103 12 0	18153
Hemyock -	133 49 0	37026	Upcot Pen New Station	46 47 0	24251
Holman Clavell -	14 20 0		Tallaton Steeple -	30 1 0	
Kentisbere -	33 4 0	38381	Kentisbere -	127 0 0	27459
Hemyock -	131 38 0	29447	Wherry Farm -	43 26 30	31892
Holly Tree near the Taun- ton Turnpike Road	12 18 0		Sampford Peverel -	9 33 30	
Hemyock -	29 16 0	29431	Gaddon Hill -	162 52 29	21714
Clay-Hydon Steeple -	115 21 0	15921	Kentisbere -	11 28 44	32127
Holly Tree -	35 23 0		Holbuxton Steeple -	5 38 47	
Upcot Pen -	62 6 0	554	Kentisbere -	101 21 9	19830
Hembury Fort -	2 15 0	12461	Wherry Farm -	61 32 50	22113
Upcot Pen New Station.	115 39 0		Williton Steeple -	17 5 52	
Upcot Pen -	111 23 0	554	Hembury Fort -	26 27 31	24628
Wherry Farm -	12 33 0	2374	North Ottery Moor -	92 40 15	10985
Upcot Pen New Station	56 4 0		St. Mary Ottery Steeple	60 52 14	
Upcot Pen New Station	113 16 0	25577	Hembury Fort -	111 53 4	37266
Wherry Farm -	62 4 0	26070	North Ottery Moor -	44 18 26	49507
Clist-Hydon Steeple -	4 40 0		Bradinch Steeple -	23 48 30	
Upcot Pen New Station	75 1 0	25812	Hembury Fort -	79 44 12	8663
Hembury Fort -	76 56 0	25597	North Ottery Moor -	23 5 26	21735
Clist-Hydon Steeple -	28 3 0		Pehembury Steeple -	77 10 22	
Upcot Pen New Station	117 50 0	25099	North Ottery Moor	120 30 14	21741
Hembury Fort -	42 33 0	32821	South Ottery Moor -	31 36 52	35698
Columpton Steeple -	19 37 0		Pehembury Steeple	27 46 54	
Kentisbere -	74 24 0	25209	North Ottery Moor -	143 52 54	19631
Wherry Farm -	90 21 0	24281	South Ottery Moor -	17 21 44	37215
Columpton Steeple -	15 15 0		Admiral Graves's House	17 5 22	
Culmstock -	34 51 28	38877	Hembury Fort -	50 42 4	18352
Kentisbere -	118 18 25	25238	North Ottery Moor -	55 4 44	17323
Columpton Steeple -	26 50 7		Honiton Chapel -	74 12 31	

Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.
South Ottery Moor -	65 46 32	47012	Membury - -	53 54 0	27096
West Ottery Moor -	89 18 32	42875	Widworthy - -	65 50 0	23996
General Simcoe's House	24 54 56		Musbury Steeple -	60 16 0	
Dumpdon - -	37 58 0	21637	Harner Hill - -	106 43 0	37392
Harner Hill - -	57 17 0	15760	Membury - -	59 0 0	41779
Widworthy - -	84 45 0		Seaton Steeple -	14 17 0	
Dumpdon - -	8 43 0	35261	Harner Hill - -	34 55 0	46472
Harner Hill - -	150 14 0	10763	Widworthy - -	130 2 0	34741
Membury - -	21 3 0		Beer Signal Staff -	15 3 0	
Harner Hill -	152 29 0	10762	Harner Hill -	56 47 0	14899
Widworthy - -	11 7 0	2571	Widworthy - -	58 38 0	14598
Membury - -	16 24 0		Shute Hill Signal Staff	64 35 0	
Harner Hill -	97 37 0	28725	Widworthy -	47 31 0	14598
Widworthy -	55 30 0	34547	Membury - -	34 3 0	19227
Chimney of Hunter's Lodge - -	26 53 0		Shute Hill Signal Staff	98 26 0	
Harner Hill -	54 52 0	28711	Harner Hill - -	134 44 20	18753
Membury - -	103 47 0	24176	Bacon Hill - -	39 56 4	20752
Chimney of Hunter's Lodge -	21 1 0		Axminster Steeple -	5 19 36	
Widworthy - -	44 23 0	34540	Widworthy - -	140 2 0	22145
Membury - -	87 23 0	24184	Membury - -	18 24 0	45066
Chimney of Hunter's Lodge -	1 14 0		Wishcomb Tower -	21 34 0	
Harner Hill - -	1 52 0	25125	Dumpdon - -	40 8 0	15929
Membury - -	120 28 0	17893	Widworthy - -	47 36 0	17904
Chimney of Cuthay's House - -	1 40 0		Turnpike House on Hill South of Honiton -	92 16 0	
Harner Hill -	123 42 0	40765	Dumpdon - -	27 2 0	11989
Widworthy - -	41 28 0	51216	Widworthy - -	26 37 0	12163
Lambert's Castle -	14 50 0		Four Tree near Russell Buildings - -	126 21 0	
Harner Hill - -	128 20 0	30619	Widworthy - -	23 6 0	22171
Widworthy - -	31 39 0	42243	Wishcomb - -	78 37 0	8873
Hawkchurch - -	17 1 0		Broad Down - -	78 17 0	
Widworthy -	23 33 0	12243	Widworthy - -	21 7 0	34740
Membury - -	127 28 0	21265	Wishcomb - -	129 21 0	16185
Hawkchurch -	28 59 0		Beer Signal Staff -	29 32 0	
Harner Hill -	56 9 0	25571	Wishcomb - -	38 31 0	27759
Widworthy - -	76 57 0	24007	Broad Down - -	126 37 0	21537
Musbury Steeple -	36 54 0		South Ottery Moor -	14 52 0	

Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.
South Ottery Moor	125° 43' 0"	8615	Widworthy - - -	29° 20' 30"	8192
Broad Down -	14° 45' 0"	27471	Widden Pen - -	26° 53' 0"	8878
North Station Peak Hill	39° 32' 0"	•	North Leigh - -	123° 46' 30"	
South Ottery Moor -	110° 51' 0"	8624	Widworthy - - -	9° 9' 0"	8197
Wishcomb -	14° 39' 0"	31864	Wishcomb Tower -	5° 18' 0"	14113
North Station Peak Hill	54° 30' 0"		North Leigh - -	165° 33' 0"	
Broad Down -	21° 42' 0"	19902	North Leigh - -	79° 10' 0"	3418
North Station Peak Hill	39° 40' 0"	11610	Widden Pen - -	22° 10' 30"	8893
Salcomb Hill -	118° 58' 0"		North Leigh Steeple -	78° 39' 30"	
South Ottery Moor -	64° 54' 0"	13045	Widworthy - - -	113° 21' 0"	7364
Broad Down -	36° 26' 0"	19891	Widden Pen - -	20° 36' 30"	19207
Salcomb Hill -	78° 40' 0"		Offwell Steeple -	46° 2' 30"	
South Ottery Moor -	62° 57' 0"	11700	Salcomb Hill -	40° 8' 0"	5814
Salcomb Hill -	53° 27' 0"	12971	North Station Peak Hill	27° 50' 0"	8073
South Station Peak Hill	63° 36' 0"		Sidmouth Steeple -	112° 2' 0"	
Salcomb Hill -	155° 45' 0"	14333	Widworthy - - -	65° 0' 0"	39541
Broad Down -	10° 7' 30"	33486	Wishcomb - - -	81° 23' 0"	36252
High Peak Station -	14° 7' 30"		Whitland's Signal Staff	33° 37' 0"	
Salcomb Hill -	13° 10' 0"	12969	South Ottery Moor	11° 36' 0"	21858
North Station Peak Hill	109° 1' 0"	3125	South Station Peak Hill	155° 39' 0"	10660
South Station Peak Hill	57° 49' 0"		Ottertton Steeple -	12° 45' 0"	
South Ottery Moor	113° 51' 0"	14464	High Peak - - -	98° 40' 0"	8130
Broad Down -	25° 47' 0"	30413	South Station Peak Hill	49° 2' 0"	10544
Peak Hill Signal Staff	40° 22' 0"		Ottertton Steeple -	32° 18' 0"	
South Ottery Moor -	13° 58' 0"	14475	Salcomb Hill -	23° 38' 0"	14345
South Station Peak Hill	123° 54' 0"	4209	South Station Peak Hill	91° 43' 0"	5753
Peak Hill Signal Staff	42° 8' 0"		High Peak - - -	64° 39' 0"	
South Ottery Moor -	19° 48' 0"	22212	South Ottery Moor -	20° 16' 0"	24820
Broad Down -	85° 9' 0"	7551	South Station Peak Hill	143° 25' 0"	14425
Clump of Firs on Farway Hill -	75° 3' 0"		Budleigh Steeple -	16° 19' 0"	
South Ottery Moor	20° 17' 0"	20870	South Station Peak Hill	61° 16' 0"	14415
Broad Down -	74° 50' 0"	7496	High Peak - - -	95° 19' 0"	12694
Cottage on Broad Down	84° 53' 0"		Budleigh Steeple -	23° 25' 0"	
Wishcomb Tower -	54° 19' 0"	7256	South Ottery Moor -	52° 8' 0"	26288
Broad Down -	51° 47' 0"	7502	South Station Peak Hill	102° 4' 0"	21221
Cottage on Broad Down	73° 54' 0"		Clump of Firs on Woodbury Hill -	25° 48' 0"	
Widworthy - - -	20° 12' 0"	15059	South Ottery Moor -	67° 22' 0"	15511
Wishcomb Tower -	32° 59' 0"	9552	South Station Peak Hill	68° 10' 0"	15416
Widden Pen -	126° 49' 0"		Red Brick House on West Ottery Moor -	44° 28' 0"	

Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.
South Station Peak Hill	136 30 0	15409	Hembury Fort	14 48 0	20540
High Peak	32 4 0	19979	St. Size Hill	145 22 0	9232
Red Brick House	11 26 0		Honiton Steeple	19 50 0	
South Station Peak Hill	84 42 0	6453	St. Size Hill	83 54 0	11105
High Peak	51 15 0	8239	Honiton Steeple	53 54 0	13666
Colyton Rawleigh	44 3 0		Dumpdon	42 12 0	
South Ottery Moor	44 22 0	20169	Dumpdon	152 38 0	9440
Broad Down	63 13 0	15798	Honiton Steeple	11 8 0	22472
Weston House	72 25 0		Luppit Steeple	15 14 0	
Hembury Fort	6 57 0	12262	Dumpdon	157 6 0	14516
General Simcoe's Signal Staff	136 58 0	2174	Honiton Steeple	11 48 0	27622
St. Size Hill	36 5 0		Upottery Steeple	11 6 0	
Hembury Fort	13 32 0	7979	Honiton Steeple	65 42 0	27633
St. Size Hill	22 31 0	4876	St. Size Hill	94 51 20	25276
Awliscombe Steeple	143 57 0		Upottery Steeple	19 26 40	
Hembury Fort	66 26 0	20836	Tidcomb	85 19 0	27431
General Simcoe's Staff	83 16 30	19230	Stoodley Beacon	37 23 0	45030
North Ottery New Station	30 17 30		Cadbury Castle	57 18 0	
Hembury Fort	29 48 0	6944	Tidcomb	36 23 0	27436
North Ottery New Station	13 7 0	15207	Christcross	98 13 0	16443
Buckerell	137 5 0		Cadbury Castle	45 24 0	
Hembury Fort	36 38 0	6943	Chr'stross	72 26 30	16450
General Simcoe's Staff	39 35 0	6502	Rocks Barton	29 37 0	31735
Buckerell	103 47 0		Cadbury Castle	77 56 30	
Hembury Fort	94 35 0	1214	Cadbury Castle	63 25 0	3628
General Simcoe's Staff	6 28 0	10748	Rocks Barton	6 9 0	30286
Hembury Fort New Station	78 57 0		Furzdon	110 26 0	
Hembury Fort	33 31 0	6757	Tidcomb	101 45 0	29927
Hembury Fort New Station	139 49 30	5783	Cadbury Castle	41 9 0	44527
Broadhembury Steeple	6 39 30		Studley Steeple	37 6 0	
North Ottery New Station	7 55 0	11693	Cadbury Castle	165 42 0	21318
Buckerell	23 57 0	3967	Furzdon	12 14 0	24850
Buckerell Steeple	148 8 0		Poughill Steeple	2 4 0	
Hembury Fort	23 14 0	9253	Cadbury Castle	103 25 0	8673
Buckerell	113 8 0	3969	Furzdon	56 14 0	10148
Buckerell Steeple	43 38 0		Cadeleigh Steeple	20 21 0	
North Ottery New Station	36 59 0	10913	Cadbury Castle	81 15 0	4853
Buckerell	45 20 0	9231	Cadeleigh Steeple	31 9 0	9272
Fenytton Steeple	97 41 0		Prawhill	67 36 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Cadbury Castle -	18 58 0	21326	Cadbury Castle -	16 33 0	22535
Prawhill -	155 39 0	16811	Rocks Barton -	32 21 0	11996
Poughill Steeple -	5 23 0		Rewe Steeple -	131 6 0	
Prawhill -	23 17 0	10552	Furzdon -	15 9 0	20234
Poughill Steeple -	30 22 0	8250	Rocks Barton -	26 11 0	11985
Chelton Fitzpain Steeple	126 21 0		Rewe Steeple -	138 40 0	
Tidcomb -	45 46 0	13302	Whitestone -	20 22 6	11701
Newcot Highway -	25 8 0	22440	Christcross -	6 25 14	36420
Turret on a House near Tiverton -	109 6 0		Newton St. Cyrus Steeple	153 12 38	
Christcross -	10 45 0	32189	Whitestone -	22 58 38	26581
Tidcomb -	153 12 0	13316	Christcross -	24 34 32	24949
Turret on House -	16 3 0		Stoke, Cannon's Steeple	132 26 50	
Newcot Highway -	156 8 0	2230	Whitestone -	17 22 34	23348
Stoodley Beacon -	3 43 0	13918	Christcross -	15 39 24	25837
Templeton Tree -	20 9 0		Brampfordspeke Steeple	146 58 2	
Stoodley Beacon -	20 16 0	21600	Whitestone -	95 4 27	1515
Newcot Highway -	138 29 0	11325	Christcross -	1 49 37	47319
Cruwys Morchard Steeple	21 15 0		Whitestone Steeple	83 5 30	
Newcot Highway -	96 59 0	16683	Whitestone -	15 7 10	47144
Cruwys Morchard Steeple	57 7 0	21282	Christcross -	149 45 20	9104
Rackenfurd Steeple -	31 54 0		Gernsey's Gazebo -	15 7 30	
Newcot Highway -	42 30 0	16682	Whitestone -	84 10 43	83647
Stoodley Beacon -	92 17 0	11279	Christcross -	61 42 13	74034
Rackenfurd Steeple -	45 13 0		Woodbury Signal Staff	34 7 4	
Whitestone -	122 23 46	53468	Whitestone -	45 3 0	50780
Exeter Cathedral -	43 8 45	66017	Christcross -	72 34 0	37668
Puddington Steeple -	14 27 29		Rockbeare Steeple -	62 23 0	
Cadbury Castle -	111 32 0	11346	Whitestone -	56 11 50	57187
Rocks Barton -	16 23 0	37419	Christcross -	72 6 10	49936
Bickleigh Steeple -	52 5 0		Aylesbeare Steeple -	51 42 0	
Christcross -	35 58 0	52446	Cadbury Castle -	31 28 0	59817
Tidcomb -	126 24 0	38268	Rocks Barton -	11 42 0	36699
Burlescombe Steeple -	17 38 0		Aylesbeare Steeple -	26 50 0	
Christcross -	17 13 0	37364	Christcross -	47 16 0	49936
Tidcomb -	145 16 0	19410	Rocks Barton -	92 5 0	36703
Uploman Steeple -	17 31 0		Aylesbeare Steeple -	40 39 0	
Cadbury Castle -	13 53 0	25688	Christcross -	120 27 0	21818
Rocks Barton -	42 12 0	9176	Cadbury Castle -	34 22 0	33318
Upton Pyne Steeple -	123 55 0		Spray down -	25 11 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects	Angles for Calculation.	Distances in Feet.
Haldon Old Station -	87 58 14	18903	Haldon Old Station -	55 0 56	21308
Haldon New Station	64 2 21	21012	Haldon New Station -	97 39 54	17615
Alphington Steeple -	27 59 25		Exminster Steeple -	27 19 10	
Haldon Old Station -	8 44 54	18917	Haldon Old Station -	32 42 36	46633
Exeter Cathedral -	19 46 6	8507	Haldon New Station	139 22 13	38700
Alphington Steeple	151 29 0		Woodbury Hill Summer House - -	7 55 11	
Haldon Old Station -	133 7 35	30396	Haldon Old Station -	71 13 38	43614
Haldon New Station	35 54 1	37834	Haldon New Station -	95 45 50	41503
Whitestone Steeple -	10 58 24		Honiton Cyst Steeple	13 0 32	
Haldon Old Station -	11 35 36	40660	Haldon New Station -	61 3 40	14292
Haldon New Station	164 44 45	31057	Exeter Cathedral -	28 56 40	25844
Exmouth Chapel -	3 39 39		Lawrence Tower -	89 59 40	
Haldon New Station -	101 33 46	29125	Haldon Old Station -	74 10 20	44631
Exeter Cathedral -	38 53 43	45445	Exeter Cathedral -	9 33 50	25844
Exmouth Mill -	39 31 34		Lawrence Tower -	96 15 50	
Haldon Old Station -	24 40 48	25441	Haldon Old Station -	17 13 0	16293
Haldon New Station	141 16 4	16982	Lawrence Tower -	156 31 0	12102
Belvidere at Powderham	14 2 28		Castle Hill - -	6 16 0	
Haldon Old Station -	72 2 20	25446	Haldon Old Station -	12 52 0	14689
Exeter Cathedral -	52 5 0	30583	Castle Hill - -	58 55 0	3820
Belvidere at Powderham	55 52 40		Small Clump of Fir on the Point of a Hill - -	108 13 0	
Haldon Old Station -	21 35 8	27701	Castle Hill - -	70 17 0	5679
Haldon New Station	147 19 39	18878	Clump of Firs - -	70 24 0	5675
Vine on the Square Tower Powderham Castle	11 5 13		White Chimney of third House from Exeter at Longdown End -	39 19 0	
Haldon Old Station -	51 48 4	27761	Haldon Old Station	20 27 0	10024
Haldon New Station	108 29 59	23005	Whitestone Steeple -	9 28 0	21294
Topsham Chapel -	19 41 57		Dunchideock -	150 5 0	
Haldon Old Station	39 42 0	12035	Haldon Old Station -	17 18 0	10018
Haldon New Station	85 28 57	7712	Lawrence Tower -	149 43 0	5907
Kenn Steeple -	54 49 4		Dunchideock -	129 59 0	
Haldon Old Station -	71 28 14	38040	Haldon Old Station -	9 39 0	8514
Haldon New Station	93 31 27	36136	Dunchideock -	41 15 0	2164
Sourton Steeple -	15 0 19		Dunchideock Steeple	129 6 0	
Haldon Old Station	41 33 48	41147	Haldon Old Station -	20 16 0	5639
Haldon New Station	127 27 49	34393	Dunchideock -	22 26 0	5118
Woodbury Steeple -	10 58 23		Turret on North Wing of Haldon House -	137 18 0	
Haldon Old Station -	86 9 35	28656			
Haldon New Station	74 27 53	29676			
Heavitree Steeple -	19 22 32				



Names of Stations and inter- sected Objects.	Angles for Calculation.		Names of Stations and inter- sected Objects.	Angles for Calculation	Distances in Feet.
Haldon Old Station -	83 47 0	10279	Holcomb Down -	83 31 0	37500
Lawrence Tower -	71 51 0	10754	Lyndridge -	82 23 0	37592
Shillingford Steeple -	24 22 0		Hopes-nose -	14 6 0	
Haldon Old Station -	13 5	978	Coffinswell -	14 10 30	12624
Lawrence Tower -	3 36 30	3517	Hopes nose -	12 1 30	5830
A New Station on Haldon	163 18 30		Warbury Hill -	133 48 0	
New Station -	42 32 30	2275	Hopes-nose -	27 5 0	3765
Lawrence Tower -	39 52 30	2399	Warbury Hill -	34 41 0	3013
Ashton -	97 35 0		Torwood -	118 14 0	
Lawrence Tower -	107 26	6018	Warbury Hill -	78 22 0	20446
Ashton -	53 48	7115	Coffinswell -	67 0 0	21756
Doddescombeleigh Steeple	18 46 0		Marldon -	34 38 0	
Castle Hill -	58 46 0	6278	Warbury Hill -	113 9 0	20439
Clump of Firs -	84 0 0	5398	Torwood -	59 33 0	21800
Dunchideock -	37 14 0		Marldon -	7 18 0	
Castle Hill -	129 2 0	5673	Holcomb Down -	73 35 30	13755
Dunchideock -	24 6 0	10791	Lyndridge -	68 0 0	14232
Longdown End Chimney	26 52 0		Shaldon -	38 24 30	
Lawrence Tower -	59 29 0	5982	Lyndridge -	16 0	14227
Dunchideock -	60 53 0	5898	Coffinswell -	35 46 0	11527
Doddescombeleigh Steeple	59 38 0		Shaldon -	115 58 0	
Lawrence Tower -	57 25 0	7988	Coffinswell -	18 6 30	6870
Ashton -	105 47 0	6995	Hopes-nose -	11 20 0	10865
Ashton Steeple -	16 48 0		Church St. Mary Steeple	150 33 30	
Haldon New Station	22 7 48	10541	Hopes-nose -	20 42 0	10868
Little Haldon -	12 34 57	18229	Warbury Hill -	38 28 0	5794
Lord Lisburn's Obelisk	145 17 15		Church St. Mary Steeple	20 50 0	
Lord Lisburn's Obelisk	18 58 50	18855	Hopes-nose -	49 56	20638
Little Haldon -	86 16 40	6146	Warbury Hill -	115 16	17465
Holcomb Down -	74 44 30		Paington Steeple -	14 48	
Holcomb Down -	88 36	9217	Torwood -	89 29	17228
Lord Lisburn's Obelisk -	26 19	20784	Warbury Hill -	80 35	17463
Lyndridge -	65 5		Paington Steeple -	9 36	
Holcomb Down	61 56	24653	Torwood -	55 5 0	11182
Lyndridge -	96 15	21884	Warbury Hill -	112 45 0	11721
Coffinswell	21 19		Cockington Steeple -	12 10 0	
Holcomb Down.	21 36	37511	Hopes-nose -	55 7 30	18920
Coffinswell -	126 31	17182	Warbury Hill -	107 49 0	16304
Hopes-nose	31 53 0		Chimney of White House near Paington Bay	17 3 30	

Names of Stations and intersected Objects.	Angles for Calculation	Distances in Feet.	Names of Stations and intersected Objects.	Angles for Calculation	Distances in Feet.
Warbury Hill -	73 7 0	16303	Lyndridge - -	97 28 1	20526
Torwood - -	96 18 0	15695	Shaldon - -	50 18 0	26452
Chimney of White House	10 35 0		Week Steeple - -	32 14 0	
Torwood - -	10 5 0	23857	Lyndridge - -	79 49 0	13312
Mardon - -	112 1 0	4505	Teigngrace Spire -	37 30 0	21522
Tree on Beacon Hill -	57 54 0		Ideford - -	62 41 0	
Warbury Hill -	51 52 30	7830	Ideford - -	137 4 0	24285
Coffinswell - -	38 40 0	9931	Teigngrace Spire -	5 48 0	36029
Building on Chapel Hill	89 47 30		Chudleigh - -	37 8 0	
Lyndridge - -	19 48 0	18222	Ideford - -	75 38 0	10114
Coffinswell - -	52 29 0	7752	Chudleigh - -	83 38 0	9858
Furze Hill - -	107 43 0		Chudleigh Steeple -	20 44 0	
Warbury Hill -	13 13 0	19506	Little Haldon - -	37 24 5	54751
Coffinswell - -	144 59 0	7772	Rippon Tor - -	69 24 30	35525
Furze Hill - -	21 48 0		Blackingstone Rock -	73 11 25	
Coffinswell - -	36 47 0	11915	Rippon Tor O'd Station	37 30 30	233
Furze Hill - -	103 54 0	7350	Blackingstone Rock -	0 13 50	35340
King's Kerswell Steeple -	39 19 0		Rippon Tor New Station	142 15 40	
Coffinswell - -	26 25 0	18632	Blackingstone Rock -	137 45 0	8360
Furze Hill - -	137 4 0	12170	Rippon Tor New Station	7 42 30	41907
Abbot's Kerswell Steeple	16 31 0		Mardon Down - -	34 32 30	
Lyndridge - -	114 34 0	19428	Rippon Tor New Station	17 20 30	44331
Shaldon - -	38 23 0	28457	Mardon Down - -	91 46 30	13220
Teigngrace Spire -	27 3 0		Cranbrook Castle -	70 53 0	
Lyndridge - -	75 36 0	134 2	Cranbrook Castle -	113 44 0	6322
Shaldon - -	40 41 0	204 12	Mardon Down - -	20 9 30	16793
King's Teignton Steeple	43 43 0		Drewsteignton - -	46 6 30	
Lyndridge - -	45 54 0	36 59	Cranbrook Castle -	70 23 0	19188
Coffinswell - -	97 4 0	26093	Mardon Down - -	69 26 30	19303
Ipplepen Steeple -	37 2 0		Cheliton Bishop's -	40 10 30	
Coffinswell - -	33 42 0	18088	Cranbrook Castle -	55 21 0	28371
Shaldon - -	109 20 0	10636	Mardon Down - -	97 6 30	23520
Bishop's Teignton -	30 58 0		St. Mary Tedbourne -	27 32 30	
Lyndridge - -	41 21 0	12644	Cranbrook Castle -	38 30 0	45828
Holcomb Down -	91 52 0	8359	Mardon Down - -	128 26 30	36424
Signal Staff, Teignmouth.			Whitstone Steeple -	13 3 30	
Fort - -	46 46 0		Cranbrook Castle -	110 29 0	21848
Holcomb Down -	94 33 0	7438	Mardon Down - -	44 1 30	28775
Shaldon - -	27 20 0	16149	Hittesleigh - -	25 29 30	
Dawlish Signal Staff -	58 7 0				

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distance in Feet	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Cranbrook Castle	90 15 0	37570	High Hampton	19 28	54396
Mardon Down	70 23 30	39882	Winckley	99 29	18379
Colebrooke	19 21 30		Ring's Ash	61 3	
Cranbrook Castle	122 12 0	11703	Cawsand Beacon	16 6 24	48119
Mardon Down	26 58 30	21832	Spreyton	146 55 0	24450
Barn	30 49 30		Zeal Monachorum	16 58 3	
Cranbrook Castle	74 15 0	16977	Bradbury Castle	33 8 35	62545
Mardon Down	62 12 30	18470	Cawsand Beacon	90 11 3	34196
Calford House	43 32 30		North Tawton	56 39 53	
Cranbrook Castle	60 49 0	15526	Hatherleigh	48 26 50	23959
Mardon Down	67 22 30	14685	High Hampton	73 49 30	18608
Blacksmith's Shop	51 48 30		North Lewe	57 43 40	
Bradbury Castle	43 18 30	62585	High Hampton	118 22 5	19475
Cawsand Beacon	81 6 41	43150	Hatherleigh	29 26 51	34852
Budleigh Steeple	55 34 49		Beaworthy	32 10 19	
Bradbury Castle	25 33 37	27558	Hatherleigh	19 0 0	34848
Hatherleigh	44 46 37	17004	North Lewe	128 23 40	14176
Inwardleigh Steeple	109 39 46		Beaworthy	34 36 0	
Bradbury Castle	25 41 27	53507	St. Stephen's Down	33 18 6	31587
Hatherleigh	15 35 2	25713	Black Down	45 39 20	40057
Honey Church	38 43 31		Broadwoodwidger	121 2 34	
Hatherleigh	86 42 3	11550	St. Stephen's Down	19 24 39	37474
Bradbury Castle	21 49 27	39075	Black Down	24 37 57	29883
Jacobstowe	71 28 3		Stowford	135 57 31	
High Hampton	63 9 0	16890	Bradbury Castle	33 2 45	14384
Hatherleigh	48 13 10	20208	St. Stephen's Down	8 53 5	50715
Petrock Stowe	68 37 50		Bratton Clovelly Steeple	138 3 30	
High Hampton	32 41 0	22747	Bradbury Castle	47 7 50	31743
Hatherleigh	90 59 30	12437	St. Stephen's Down	23 6 56	36872
Meeth	66 19 30		Whwater	129 45 14	
High Hampton	24 58 0	28739	Bradbury Castle	55 9 18	50489
Hatherleigh	112 14 57	13105	St. Stephen's Down	51 12 3	53168
Iddesleigh	42 47 33		Brenton Tor	73 38 39	
Bradbury Castle	26 10 17	55431	Black Down	54 11 0	37331
High Hampton	119 55 5	31514	St. Stephen's Down	46 39 57	50693
Dowland	23 51 50		Bratton Clovelly	89 9 3	
Bradbury Castle	26 30 30	63488	Bratton Clovelly	20 6 40	33751
High Hampton	107 21 40	48258	St. Stephen's Down	31 25 0	22263
Winckley	26 7 54		Lifton Steeple	28 28 20	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Black Down - - -	5 31 6	77732	Stamford - - -	46 4 30	11563
St. Stephen's Down	153 18 7	10637	Stratton Steeple -	124 39 20	10124
North Petherwin Steeple	21 10 47		Church Marham Steeple	9 16 10	
Black Down - - -	15 25 47	70014	Holsworthy Steeple -	75 21 40	15114
St. Stephen's Down -	104 58 29	19282	Beacon Moor - - -	54 26 0	17977
Boyton Steeple - -	59 35 44		Holsworthy Beacon -	50 12 20	
Black Down - - -	4 46 37	61295	Holsworthy Beacon -	64 57 0	26502
St. Stephen's Down -	74 20 14	5301	Beacon Moor - - -	74 17 0	24941
Werrington Steeple -	100 53 9		Shebbear - - -	42 46 0	
St. Stephen's Down -	120 10 29	58942	Holsworthy Steeple -	33 3 30	35662
Warbstow - - -	35 23 31	87980	Beacon Moor - - -	128 45 0	24944
Bradbury Barrow -	44 26 0		Shebbear - - -	18 11 30	
St. Stephen's Down -	65 54 33	36515	Holsworthy Beacon -	84 44 0	17911
Warbstow - - -	50 47 45	43018	Beacon Moor - - -	47 31 0	24184
North Tamerton Steeple	63 17 42		Newton St. Petrock -	47 45 0	
St. Stephen's Down -	11 42 24	36515	Holsworthy Beacon -	101 52 0	11691
Holsworthy Steeple	17 59 20	23990	Shebbear - - -	21 35 40	31088
North Tamerton Steeple	15 18 16		Sutcombe Steeple -	56 32 20	
St. Stephen's Down -	10 53 0	33999	Holsworthy Beacon -	65 47 30	12759
North Tamerton Steeple	64 1 20	7141	Sutcombe Steeple -	57 12 30	11719
Percott Steeple - -	105 5 40		Milton Damerill -	97 0 0	
St. Stephen's Down -	19 42 13	13998	Shebbear - - -	26 31 30	12670
Bridgelnle - - -	24 38 17	27496	Sutcombe Steeple -	15 59 30	20543
Percott Steeple - -	135 32 30		Thornbury Steeple -	137 29 0	
St. Stephen's Down -	31 58 40	24206	Pyworthy Steeple -	44 14 0	23145
North Tamerton Steeple	38 44 0	20488	Beacon Moor - - -	63 57 0	17971
Chapmanswell - -	109 17 20		Holsworthy Beacon -	71 49 0	
Holsworthy Steeple -	13 9 0	36841	Holsworthy Beacon -	60 12 30	18334
St. Stephen's Down -	20 16 0	24196	Pyworthy Steeple -	48 35 0	21216
Chapmanswell - -	146 35 0		Hollacombe Steeple -	71 12 30	
St. Stephen's Down -	13 39 50	28367	Holsworthy Steeple -	72 54 0	23280
Chapmanswell - -	116 40 50	7499	Beacon Moor - - -	71 32 0	23459
Vingustowe - - -	12 39 20		Belland Down - -	55 34 0	
Stamford - - -	32 19 30	2264	Beacon Moor - - -	45 0 0	33763
Week St. Mary Steeple	2 25 10	28681	Bradbury Castle -	54 35 18	29293
Stratton Steeple -	145 15 20		High Hampton	80 24 0	
Stamford - - -	152 6 0	2828	Beacon Moor - - -	9 37 30	33950
Week St. Mary - -	2 17 30	33094	High Hampton - -	87 2 30	5684
Poughill Steeple -	25 36 30		Sheepwash - - -	83 20 0	

Names of Stations and inter- sected Objects.		Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects		Angles for Calculation.	Distances in Feet.
High Hampton	-	57 29 0	8880	Crimp Down East Station	-	10 25 5	41224
Sheepwash	-	83 4 0	7543	Woolfardisworthy Steeple	-	141 7 20	11877
Black Torrington	-	39 27 0		Cross Park	-	28 27 35	
High Hampton	-	65 25 0	23982	Cross Park	-	82 9 30	17513
Sheepwash	-	106 26 40	21745	Woolfardisworthy Steeple	-	61 19 40	19773
Bradford Steeple	-	13 8 20		West Putford	-	30 30 50	
Beacon Moor	-	29 2 30	39643	Billevy	-	37 34 0	63694
Kilkhampton	-	49 49 40	25186	Langtree	-	115 40 0	43085
Bradworthy Steeple	-	101 7 50		Woolfardisworthy Steeple	-	26 46 0	
Holsworthy Steeple	-	16 59 30	38603	Dunkery Beacon	-	39 38 21	24662
Panels Week	-	150 56 50	23226	Haddon Beacon	-	27 47 53	33463
Kilkhampton	-	12 4 0		Wembury Barrow	-	112 33 40	
Kilkhampton	-	124 20 50	13555	Northmolton Ridge	-	122 10 20	58014
Holsworthy Steeple	-	13 30	47586	Span Head	-	43 23 10	71489
Crimp Down East Station	-	42 3		Light Hill Barrow	-	14 26 30	
Kilkhampton	-	126 36	13538	Northmolton Ridge	-	21 52 40	34330
Holsworthy Steeple	-	13 6 30	47924	Span Head	-	130 9 30	10738
Crimp Down West Station	-	40 17 50		Barrow West of Dudum	-	27 57 50	
Crimp Down East Station	-	71 28	8659	Northmolton Ridge	-	50 0 30	27003
Kilkhampton	-	14	13569	Span Head	-	79 50 10	21018
Drake's House	-	18		Ashton Hill	-	50 9 20	
Crimp Down West Station	-	75 14 0	16501	Northmolton Ridge	-	34 1 50	29983
Kilkhampton	-	59 40 40	18485	Span Head	-	102 42 40	17201
Tinnacombe Windmill	-	45 5 20		Dudum	-	43 15 30	
Crimp Down East Station	-	130 12	9322	Northmolton Ridge	-	64 0 40	9789
Holsworthy Steeple	-	7 34	54074	Span Head	-	27 40 50	18941
Wooly Down East Station	-	42 14		Barrow North of the Ridge	-	88 18 30	
Crimp Down East Station	-	6 24 30	9044	Span Head	-	26 17 0	52579
Wooly Down East Station	-	71 38 10	1064	Northmolton Ridge	-	138 14 37	34960
Wooly Down West Station	-	101 57 20		Rose Ash Steeple	-	15 28 23	
Wooly Down West Station	-	65 26 30	4008	Span Head	-	118 20 54	13651
Crimp Down East Station	-	26 17 30	8230	Northmolton Ridge	-	36 31 20	29518
Warmington's House	-	88 16 0		Bishop's Nympton Steeple	-	25 7 46	
Crimp Down East Station	-	41 0	31299	Span Head	-	32 42 18	48027
Wooly Down East Station	-	124 50	25023	Northmolton Ridge	-	126 42 30	32370
Woolfardisworthy Steeple	-	11 9		Wembury Barrow	-	20 35 2	
Wooly Down East Station	-	17 43 0	27717	Span Head	-	42 56 0	48561
Woolfardisworthy Steeple	-	86 9 30	7814	North Molton Ridge	-	113 39 25	36111
St James Hamlin's Lodge	-	76 7 30		Mary-Ansleig Steeple	-	23 24 35	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Span Head -	63 34 37	59248	Northmolton Ridge	35 10 16	59195
Northmolton Ridge	95 42 24	53323	Beacon Moor -	70 13 20	36235
Kingsnympton Spire -	20 42 59		Witheridge - -	74 36 24	
Haddon Beacon -	30 5 59	96424	Beacon Moor -	87 20 26	36244
Northmolton Ridge	114 55 52	53326	Span Head - -	28 13 32	76552
Kingsnympton Spire	34 58 9		Witheridge - -	64 26 2	
Span Head - -	12 36 27	54855	Beacon Moor - -	29 37 50	11709
Northmolton Ridge -	159 45 30	34607	Span Head - -	5 36 30	59237
Knowstone Steeple -	7 38 3		Kingsnympton Spire -	144 45 40	
Span Head - -	88 6 28	48537	Beacon Moor -	14 36 2	18468
Northmolton Ridge -	68 8 29	52268	Span Head -	91 40 20	72996
Chittlehampton Steeple	23 45		Burington - - -	70 43 19	
Span Head - -	70 32 53	50703	Northmolton Ridge -	9 16	46185
Northmolton Ridge -	85 0 20	47992	Witheridge -	28 39	15512
Saterleigh Gazebo -	21 26 47		Meshaw Moor -	142 5	
Span Head - -	84 6 54	33015	Witheridge - -	64 40 10	9419
Northmolton Ridge -	61 42 26	37297	Beacon Moor -	14 48 2	33316
Castle on Castle Hill -	34 10 40		Thelbridge Steeple -	100 31 36	
Northmolton Ridge -	101 18 10	34603	Witheridge - -	92 13	16709
Southmolton Steeple	42 25 0	50306	Thelbridge Steeple -	58 55	19496
East Anstey Steeple	36 16 50		Barrow on Meshaw Moor	28 52	
Northmolton Ridge -	26 28 50	36101	Witheridge - -	38 51	11475
Southmolton Steeple -	96 55 50	16216	Thelbridge Steeple -	86 10	7214
Mary Ansleigh Steeple	56 35 20		West Worlington Spire	54 59	
Span Head -	7 54 40	53197	Witheridge - -	40 11 30	9664
Southmolton Steeple -	156 12 30	18150	Thelbridge Steeple -	71 55 0	6561
Romansleigh Steeple -	15 52 50		East Worlington Spire	67 53 30	
Beacon Moor - -	67 14 59	57337	Beacon Moor - -	39 32 40	27710
Northmolton Ridge -	53 57 27	65393	West Morchard -	46 5 56	24485
Cotten Hill - -	58 47 34		Coleridge Steeple -	94 21 24	
Northmolton Ridge -	27 12 44	55095	Bradbury Castle -	15 30	80625
Beacon Moor - -	65 10 52	27758	Beacon Moor -	49 0	27712
Warkleigh Steeple -	87 36 24		Coleridge Steeple -	125 50 30	
Northmolton Ridge -	14 14 30	69640	West Morchard -	9 37 0	13739
Beacon Moor - -	111 47 40	18451	Coleridge Steeple -	11 51 0	11177
Burington Steeple -	53 57 50		Lapford Steeple -	158 32 0	
Northmolton Ridge -	9 12 10	53316	Coleridge Steeple -	46 20 30	18135
Beacon Moor -	46 45 16	11706	Lapford Steeple -	95 58 30	13218
Kingsnympton Spire -	124 2 34		Downe St. Mary	37 41	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected objects.	Angles for Calculation.	Distances in Feet.
Coleridge Steeple -	8 56	6774	Southmolton -	48 11 0	53426
Lapford Steeple -	13 12	4607	Cotten Hill -	77 14 0	40827
Nymett Rowland Steeple -	157 52 0		Roborough -	54 35 0	
Coleridge Steeple -	168 53 30	7341	Cotten Hill -	33 19 0	40528
Lapford Steeple -	4 24	18434	Belleview -	96 14	22559
Brushford Spire -	6 42 30		Roborough -	50 27 0	
Lapford Steeple -	12 27 0	28913	Southmolton -	20 12 0	53459
Coleridge Steeple -	159 55 30	18160	Belleview -	54 53 0	22567
East Budleigh Steeple -	7 37 30		Roborough -	104 55	
Thelbridge Steeple -	18 53 30	21836	Harwood -	40 19 0	32799
Beacon Moor -	39 18 3	12693	Cotten Hill -	54 30 0	21320
Chawleigh Steeple -	121 47 55		Atherington -	55 11 0	
Thelbridge Steeple -	11 30 30	33682	Harwood -	67 46 30	9780
Beacon Moor -	87 19 0	6727	Cotten Hill -	21 11 30	25046
Chumleigh Steeple -	81 10 30		Alverdiscott Steeple	91 2 0	
Southmolton -	136 29 0	31312	Parkham -	15 2	44592
Cotten Hill -	18 46 30	73449	Belleview -	80 41	11721
Molland Down -	24 44 30		Alverdiscott Steeple	84 17	
Southmolton -	133 46 0	33783	Alverdiscott Steeple	55 35 0	14914
Cotten Hill -	19 44 0	72256	Cotten Hill -	36 31 0	20676
Molland Clump -	26 50 0		Yarnscombe Steeple	87 54 0	
Southmolton -	2 44	33962	Cotten Hill -	58 46 30	20675
Molland Down -	75 50	1670	Beacon Moor -	20 46 2	49851
Molland Clump -	101 26 0		Yarnscombe Steeple	100 27 10	
Molland Down -	60 30	5731	Northam -	40 23 0	27601
Molland Clump -	103 0 0	5119	Belleview -	52 3 0	22678
Twitchen Steeple -	16 30 0		Monkleigh Steeple	87 34 0	
Southmolton -	104 23 40	15067	Northam -	66 29	28522
Cotten Hill -	16 47	50543	Belleview -	47 57	35221
Northmolton Steeple -	58 19		Buckland Brewer	65 34 0	
Southmolton -	28 23 30	41281	Northam -	27 19 0	42490
Cotten Hill -	67 0 30	21323	Belleview -	98 7 0	19696
Atherington Steeple -	84 36 0		Little Torrington Steeple	54 34 0	
Southmolton -	5 53 0	26500	Roborough -	43 58 0	28163
Cotten Hill -	8 27 0	18485	Belleview -	83 18 0	19687
Ewsdon Hill -	165 40 0		Little Torrington Steeple	52 44 0	
Southmolton -	82 45 30	162-6	Buckland Brewer -	72 54 0	12689
Cotten Hill -	40 40 30	45534	Northam -	26 4 0	27599
Wormford Hill -	76 34 0		Monkleigh Steeple -	81 2 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
	° ' "			° ' "	
Langtree - -	43 19 0	17039	Northam - -	64 42 0	8894
Bellevue - -	31 2 0	22674	Horwood Steeple - -	29 13 0	15473
Monkleigh Steeple -	105 39 0		Bideford Steeple - -	86 5 0	
Little Torrington Steeple	25 30 0	7797	Parkham - -	22 58 30	38392
Bellevue - -	14 51 0	13097	Horwood Steeple - -	64 53 30	16549
Great Torrington -	139 39 0		Barrow above Appledore	92 8 0	
Buckland Brewer - -	17 8 0	25662	Parkham - -	5 55 0	60937
Bellevue - -	35 15 0	13099	Barrow above Appledore	165 5 0	23032
Great Torrington -	127 37 0		Braunton Spire - -	9 20 0	
Langtree - -	42 39 0	33227	Parkham - -	11 19 40	36075
Bellevue - -	71 50 0	23693	Northam - -	117 21 0	7981
Beaford Spire - -	65 31 0		Westleigh Steeple -	51 10 20	
Roborough - -	82 39 0	10648	Buckland Brewer - -	10 17 0	16751
Bellevue - -	26 28 30	23689	Port Hill House - -	17 2 0	10203
Beaford Spire - -	70 52 30		Windmill Hill near Bideford	152 41 0	
Cotton Hill - -	46 22 0	30142	Windmill Hill - -	68 32 0	8012
Bellevue - -	63 31 0	24374	Port Hill House - -	45 42 0	10471
High Bickington -	70 7 0		Abbotsham Steeple -	65 46 0	
Cotton Hill - -	29 6 30	30147	Northam - -	12 46 0	12176
Beacon Moor - -	25 19 30	34284	Bideford - -	137 56 0	4016
High Bickington -	125 34 0		Twelve Acres - -	29 18 0	
Monkleigh Steeple -	120 4 0	1184	Twelve Acres - -	36 19 0	38275
Buckland Brewer -	14 18 0	15361	Northam - -	129 28 0	23363
Frithelstock Steeple -	45 38 0		Braunton Spire - -	14 13 0	
Monkleigh Steeple -	96 38 0	10370	Northam - -	115 3 0	38554
Buckland Brewer -	36 34 0	17289	Westleigh Steeple -	55 10 0	42552
Landcross Steeple -	46 48 0		Baggy Point - -	9 47 0	
Bellevue - -	26 53 0	21856	Buckland Brewer - -	46 39 0	35911
Monkleigh Steeple -	72 2 0	10380	Northam - -	81 34 0	26399
Landcross Steeple -	81 5 0		Alverdiscott Steeple -	51 47 0	
Buckland Brewer -	71 24 0	26242	Northam - -	13 45 30	27506
Monkleigh Steeple -	80 9 0	25243	Alverdiscott Steeple -	92 47 0	6549
Port Hill House -	28 27 0		Newton Tracey - -	73 27 30	
Buckland Brewer -	125 4 30	8699	Northam - -	94 11 0	27572
Monkleigh Steeple -	21 55 30	19066	Bellevue - -	56 38 0	46086
Alwington Steeple -	33 0 0		Hemton Punchardon Steeple - -	49 11 0	
Parkham - -	23 10 0	42570	Heanton Punchardon -	13 58 30	20075
Northam - -	113 36 0	18178	Cotton Hill - -	19 49 30	14295
Horwood Steeple -	43 19 0		Barnstable Spire -	146 12 0	



Names of Station and sected Objects.	Angles for Calculation	Distance in Feet.	Names of Stations and inter sected Objects.	Angles for Calculation	Distances in Feet.
Barnstaple Spire -	157 26 0	3132	Paracombe Down -	9 5 10	6498
Cotten Hill -	1 0 0	17228	Barrow west of Dureham	9 38 40	6126
Pilton Steeple -	16 34 0		Station east of Paracombe	161 16 10	
Heanton Punchardon	34 57 0	10405	Paracombe Down -	48 13 20	17215
Cotten Hill -	13 13 40	25117	Station east of Paracombe	111 10 0	13767
Fremington -	131 19 20		Chimney of a Thatched House -	20 36 40	
Fremington -	46 46 0	20767	Paracombe Down -	31 15 0	16224
Cotten Hill -	54 15 0	8643	Cotten Hill -	133 10 50	115428
Roborough -	78 59 0		Hartland Point -	15 34 10	
Cotten Hill -	16 50 20	18620	Paracombe Down -	4 32 30	62931
Pilton Steeple -	96 13 40	5426	Cotten Hill -	121 9 20	5821
Roborough -	66 54 0		Pawstock Steeple -	54 18 10	
Roborough -	125 42 0	9765	Paracombe Down -	6 24	6209
Pilton Steeple -	35 29 0	13661	Barrow west of Dureham	6 17	6324
Goodleigh Steeple	18 49		Barrow near Longstone	167 19	
Cotten Hill -	10 48 0	24847	Paracombe Down -	15 29 10	6211
Pilton Steeple -	147 2 0	8556	Station east of Paracombe	72 48	1736
Ashford Steeple -	22 10 0		Barrow near Longstone -	91 42 50	
Span Head -	31 27	54638	N. thmolton Ridge -	60 48 23	119590
Cotten Hill -	74 20	29608	Paracombe Down -	97 30 7	105301
Warkleigh -	74 13		Cotton iv Summer House	21 41 30	
High Bickington -	72 36	16000	N. thmolton Ridge -	59 1 47	180655
Cotten Hill -	31 3	29602	Paracombe Down -	107 20 37	162260
Warkleigh -	76 21		Hartland Point -	13 37 36	
Paracombe Down	51 44	2314	Hangman Hill -	42 45	30992
Cotten Hill -	47	58316	Bury Down -	108 27	22177
West Station on the Down	126 28 20		Slite Down -	28 48	
Cotten Hill -	20 30	55056	Hangman Hill -	47 0	15023
West Station -	29 0	5520	Perry Down -	63 26	12284
South West Station on Paracombe Down -	157 17 3		Hill west of Bury n Arbor	69 34	
West Station -	35 33 20	10068	Bratton Down -	7 43	34741
South West Station	28 35 0	7489	Hangman Hill -	48 26	6241
Challacombe Steeple -	15 51 40		Great Hangman -	123 50	
West Station -	68 44 40	7366	Bratton Down -	6 11 0	41412
South West Station -	82 50 50	6918	Hangman Hill -	120 17 0	5165
Paracombe Steeple -	28 18 50		Little Hangman -	53 32 0	
Span Head -	28 22 0	16732	Hangman Hill -	4 0	22274
Paracombe Down -	32 20 30	12400	Slite Down -	19 16 30	9469
Barrow west of Dureham	111 58 34		Holesbarrow -	152 39 30	

Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.
Helesbarrow - -	10 45 30	6289	Rippon Tor - -	20 54 10	34646
Slate Down - -	19 38 0	3494	East Down - -	148 20 40	23553
Ilfracombe Steeple -	142 36 30		Moreton Hampst: Steeple	10 45 10	
Hangnan Hill - -	31 0 0	47890	Barrow Hill - -	27 9 10	8078
Paracombe Down - -	101 58 20	25214	Rippon Tor - -	49 10 0	4873
Countisbury Steeple -	47 1 40		A Rock - -	103 40 50	
Sir Lawrence Palk's Tower	22 26 30	5149	Barrow Hill - -	42 54 0	5911
Haldon Old Station -	98 28 30	1987	Rock - -	47 1 50	5499
Haldon New Station -	59 5 0		Widdecombe Steeple -	90 4 10	
Haldon New Station -	118 39 0	12043	Rippon Tor - -	42 10 0	26233
Palk's Tower - -	44 3 20	15199	East Down - -	112 2 0	18997
Pleasure House Hill -	17 17 40		Bovey Tracey - -	25 48 0	
Haldon New Station -	78 28 10	9294	Denbury - -	45 28 0	16209
Palk's Tower - -	70 7 50	9683	Rippon Tor - -	28 35 0	24149
Ashwell Hill - -	31 24 0		Hele's Down - -	105 57 0	
Haldon New Station -	40 10 40	12042	Hele's Down - -	77 8 0	16954
Pleasure House Hill -	50 30 30	7770	Rippon Tor - -	39 3 0	26235
Ashwell Hill - -	89 18 50		Bovey Tracey - -	63 49 0	
Haldon New Station -	17 59 0	21 20	East Down - -	44 42 0	8835
Pleasure House Hill -	141 10 30	10, 50	Humal on Tor - -	23 57 0	15309
Hennock Steeple - -	20 50 30		Minaton Steeple -	111 21 0	
Pleasure House Hill -	90 40 0		Hele's Down - -	23 25 0	13689
Ashwell Hill - -	53 55 10	4 28	Rippon Tor - -	25 9 0	12801
Hennock Steeple -	36 24 50		Islington Steeple -	131 26 0	
Haldon New Station -	9 55 40	12058	Rippon Tor - -	16 28 0	20280
Pleasure House Hill -	85 27 0	2085	Denbury - -	23 39 0	14330
Trusham Steeple -	84 37 20		Cook's Beacon - -	139 53 0	
Hamilton Tor - -	95 42 0	24907	Cook's Beacon - -	48 9 0	11987
Rippon Tor - -	45 41 0	34640	Denbury - -	54 39 30	10946
Moreton Hampstead Steeple -	38 37 0		Tarwin - -	77 11 30	
Hamilton Tor - -	61 50 0	24903	Denbury - -	78 19 30	10952
East Down - -	68 48 0	23547	Rippon Tor - -	19 27 30	32196
Moreton Hampstead Steeple -	49 22 0		Falcom - -	82 13 0	
Rippon Tor - -	58 39 10	10374	Rippon Tor - -	25 35 20	19377
East Down - -	52 0 30	11242	Brent Ruins - -	15 27 30	31399
Barrow Hill - -	69 20 20		Ashburton Steeple -	138 57 10	
			Ashburton Steeple -	78 16 10	9983
			Rippon Tor - -	29 24 0	19911
			Hall's Down - -	72 19 50	

Names of Stations and inter- sected Objects	Angles for Calculation	Names of Stations and in- tersected Objects	Angles for Calculation	Distance in Feet
Ashburton Steeple	57 41 10	Cook's Beacon	20 8	6748
Hall's Down	75 59 40	Denbury	16 12 1	8324
Ashburton Down	60 19 10	Woodland Steeple	14 39 50	
Ashburton Down	25 6	Denbury	34 28 20	8321
Hall's Down	96 14	Tarcom	49 24 0	6015
Cook's Beacon	50 40	Woodland Steeple	92 7 40	
Ashburton Down	53 42 0	Denbury	55 20	28213
Cook's Beacon	100 15 0	Tarcom	102 42 0	24755
West Ogwell Steeple	26 3 0	Hazewell Rock	22 12 40	
Ashburton Steeple	46 51 9	Rippon Tor	57 15 50	12962
Ashburton Down	41 10 40	Denbury	73 14 10	28240
Cook's Beacon	91 58 20	Hazewell Rock	97 30 0	
Ashburton Down	129 1 10	Denbury	78 56 10	9916
Cook's Beacon	26 51 10	Cook's Beacon	38 4	15784
Hallsenger Summer House	24 7 40	Hobbin Wood's Gazebo	62 59 5	
Ashburton Down	130 49	Cook's Beacon	60 31	17385
Cook's Beacon	19 31	Denbury	69 7	16198
Hallsenger Farm House	29 39 50	Hele's Down	50 21 50	
Hele's Down	14 50 0	Cook's Beacon	22 27 50	15801
Rippon Tor	24 23 0	Hele's Down	65 14 50	6648
Denbury Steeple	40 47 0	Hobbin Wood's Gazebo	92 17 20	
Denbury	88 8 0	Tarcom	35 47 30	19958
Tarcom	73 52 0	Rippon Tor	30 5 50	19814
Haytor Rock	18 0	Bickington Steeple	108 6 40	
Cook's Beacon	26 50 0	Cook's Beacon	32 5	4889
Denbury	33 28 30	Tarcom	18 19	8263
Haytor Rock	19 41 30	Hele's House	129 36	
Denbury	67 20 0	Tarcom	87 15	9762
Tarcom	7 37 0	Rippon Tor	17 5 0	33192
High Wick Steeple	5 3 0	Buckfastleigh Station	75 40 0	
Denbury	98 42 30	Rippon Tor	10 52 40	29620
Tarcom	34 54 0	Buckfastleigh	53 42 20	6935
Ipplepen Steeple	46 23 30	Buckfastleigh Spire	15 25 0	
Denbury	22 34 0	Cook's Beacon	53 10 0	32799
Tarcom	51 36 0	Denbury	01 29 0	26788
Broad-Hempston Steeple	105 50 0	Totness Steeple	25 21 0	
Cook's Beacon	35 8	Totness Steeple	85 10 10	7446
Denbury	77 14 30	Marldon Beacon	81 50 20	19945
Broad-Hempston Steeple	67 37 30	Dartington Steeple	72 59 30	

Names of Stations and intersected Objects.	Angles for Calculation.	Distance in Feet	Names of Stations and intersected Objects.	Angles for Calculation.	Distance in Feet.
Totness Steeple -	112 4	7435	Horner Down -	22 44	25513
Willman Hill -	19 2	21121	Square Close -	124 29	11975
Dartington Steeple -	48 53		Battery Spire -	32 47	
Totness Steeple -	75 4 50	4168	Station near Totness -	73 12 41	9216
Willman Hill -	14 2 40	16594	Flap Park -	41 44 3	12965
Station South of Totness	90 52 30		Station near Harberton	65 2 5	
Station South of Totness	97 25 10	12278	Horner Down -	98 1	34511
Willman Hill -	33 48 50	21882	Square Close -	57 42 5	40424
Flap Park -	48 46 0		Willman Hill -	24 16 1	
Totness Steeple -	14 43 30	8143	Moreleigh -	30 47	22822
Willman Hill -	19 46 20	21866	Horner Down -	133 42	16161
Flap Park -	45 30 30		Harberton Steeple -	15 30	
Totness Steeple -	97 15	8818	Moreleigh -	30 20 1	6623
Station near Totness -	58 53	10217	Horner Down -	50 52	4313
Berry Pomeroy Steeple -	23 51		Moreleigh Steeple -	93 47 5	
Totness Steeple -	150 58 0	7853	Moreleigh -	78 16 28	11261
Station near Totness -	19 3 30	11672	Higher East Close -	30 7 5	21966
Little Hempston Steeple	9 53 30		Wallaton Cross -	71 35 40	
Willman Hill -	109 59 10	19550	Higher East Close -	79 54 20	15761
Marldon Beacon -	50 8 30	23934	Wallaton Cross -	38 56 20	24690
Charston Ferrers Steeple	19 52 20		Stoke Fleming Steeple	61 9 20	
Willman Hill -	105 53 0	26722	Horner Down -	10 6 3	31482
Marldon Beacon -	58 8 40	30260	Higher East Close -	134 13 30	7711
Windmill near Brixham	15 58 20		Station near Dittesham	35 40	
Willman Hill -	111 48 40	26589	Higher East Close -	12 38 20	10754
Marldon Beacon -	53 5 50	30870	Station near Dittesham	139 46 50	3644
Brixham Steeple -	15 5 30		Station near Dartmouth	27 34 50	
Willman Hill -	159 5 40	14686	Station near Dartmouth	93 13	7730
Marldon Beacon -	13 10 50	22982	Station near Dittesham	62 9	8729
Dittesham Steeple -	7 43 30		Townstall Steeple -	24 38	
Willman Hill -	159 23 30	15063	Higher East Close -	55 35	10341
Marldon Beacon -	13 7 0	23366	Station near Dittesham	77 39 40	8732
Cornworthy Steeple -	7 29 40		Townstall Steeple -	46 45 20	
Totness Steeple -	78 38 50	10331	Higher East Close -	42 56 50	10355
Marldon Beacon -	30 37 40	19881	Station near Dartmouth	65 38 10	7730
Warden House -	70 43 30		Townstall Steeple -	71 25	
Horner Down -	59 27 0	16779	Station near Dittesham	47 31	14907
Denbury -	18 51 10	41717	Station near Dartmouth	20 17	14734
Square Close -	101 41 50		Dartmouth Castle -	12 11	

Names of Stations and inter- sected Objects.	Angles for Calculation	Distances in Feet	Names of Stations and inter- sected Objects.	Angles for Calculation	Distances in Feet.
Moreleigh -	109 6 40	11198	Station South of Yealmpton	38 15 50	17578
Butterton Hill -	12 6 30	50445	Newton Down -	110 10 20	11596
East Allington Steeple	58 46 50		Gonner Signal Staff	31 33 50	
Horner Down -	34 23 20	15746	Gonner Down -	26 5 10	9093
Church Stowe Steeple	25 57 0	20325	West Down -	130 39 30	5271
Black Down -	119 39 40		Wembury Steeple -	23 15 20	
Butterton Hill -	8 51 4	63999	Gonner Down -	122 55 50	4195
Church Stowe -	150 37 50	20078	West Down -	26 39 30	7847
Malborough Spire -	20 31 6		Newton Ferrers Steeple	30 24 40	
Butterton Hill -	41 50 20	19635	East Beacon -	49 32 40	11952
East Beacon -	127 27 50	16501	Rippon Tor -	9 56 0	52722
North Huish -	10 41 50		Three Barrow Tor -	120 31 20	
Barrington -	57 55 20	2069	Three Barrow Tor -	33 16 0	5305
Hemerdon Ball -	8 1 0	12570	East Beacon -	21 9 50	8060
Plympton St. Mary Steeple	114 3 40		Stall Beacon -	125 34 10	
Barrington -	33 15 0	2536	Three Barrow Tor -	130 35 30	9275
Hemerdon Ball -	6 56 20	11509	East Beacon -	21 23 0	19317
Plympton Steeple -	139 48 40		White Barrow -	28 1 30	
Barrington -	48 48 10	24366	Slopstor -	45 57 40	14855
Hemerdon Ball -	97 46 30	18504	Hessary Tor -	62 59 40	11985
Shaugh Steeple -	33 25 20		Vixen Tor -	71 2 40	
Barrington -	66 59 0	22405	Station above Pen Beacon	69 50 30	6123
Hemerdon Ball -	76 56 10	21169	Barrington -	10 32 40	31413
Bickleigh Steeple -	36 4 50		Highest point of the Ridge of Rocks West of Pen Beacon -	99 36 50	
Barrington -	165 37 40	11256	Barrington -	121 50 0	4215
Hemerdon Ball -	6 31 10	24609	Hemerdon Ball -	12 47 40	16170
Plymstock Steeple -	7 51 10		Clarke's Gazebo -	45 22 20	
Barrington -	153 39 10	14950	Hemerdon Ball -	73 45 27	19890
Station South of Yealmpton	10 23 50	36764	Station above Pen Beacon	52 16 20	24143
Egguckland Steeple	15 57 0		Ivy Bridge Race-house	53 58 13	
Newton Down -	69 20 10	9020	Hemerdon Ball -	73 31 10	28844
Station South of Yealmpton	51 23 40	10726	Station above Pen Beacon	66 16 40	30211
Brixton Steeple -	58 46 10		Roborough Clump -	40 12 10	
Newton Down -	28 42 20	12108	Rippon Tor -	8 56 0	39365
Station South of Yealmpton	27 51 20	5892	Ryders Hill -	118 13 50	6938
Yealmpton Steeple -	53 19 20		Knot Barrow -	52 50 10	
Station South of Yealmpton	104 19 20	17572			
Barrington -	32 7 50	32014			
Gonner Signal Staff -	43 32 50				

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Ryder's Hill -	0 44 30	23180	Cawsand Beacon -	30 13 40	28367
Hessary Tor -	12 47 40	8592	Castor Rock -	07 30 -	14982
Tor Royal Flagstaff	62 29 50		Biddaford Tor -	12 10 20	
Ryder's Hill -	16 23 50	27694	Cawsand Beacon -	29 29 10	25103
Hessary Tor -	57 51 20	9233	Castor Rock -	98 36 50	12497
Bare Down Chapel	05 44 50		Chagford Steeple -	51 54 -	
Hessary Tor -	96 31 20	20450	Cawsand Beacon -	24 58 30	42256
Ryder's Hill -	31 0 30	39439	Castor Rock -	35 46 -	25576
Beeryonder Tor -	52 28 10		North Bovey Steeple	19 15 30	
Hessary Tor -	13 6 20	20456	Cawsand Beacon -	17 53 20	15341
Cut Hill -	27 58 20	9889	Castor Rock -	41 13 0	7152
Beeryonder Tor -	138 55 20		Gidley Steeple -	120 53 40	
Ryder's Hill -	45 51 40	24680	Cawsand Beacon -	46 1 - 20	10380
Hessary Tor -	51 5 50	22759	Castor Rock -	30 22 50	14032
Believer Tor -	83 2 30		Throwley Steeple -	103 22 50	
Ryder's Hill -	34 39 30	33870	Oakhampton Park	1 8 43	6226
Hessary Tor -	79 21 20	19598	Tes Tor -	21 8 20	16351
Littlever Tor -	65 59 10		Oakhampton Steeple	50 8 40	
Rippon Tor -	38 58 20	20409	Oakhampton Park	30 35	21933
Cut Hill -	18 35 0	40280	Tes Tor -	116 46	12499
Quarnion Tor -	122 26 40		Sourton Tor -	32 39 0	
East Down -	32 23 10	29737	Sourton Tor -	49 6	21541
Rippon Tor -	28 46 30	20430	Tes Tor -	95 37 50	16361
Quarnion Tor -	18 50 20		Oakhampton Steeple	35 16 10	
Cocks Tor -	36 45 20	10686	Brent Tor -	39 19 30	38883
Hessary Tor -	36 58 10	10633	Black Down -	127 52 0	31213
Great Mis Tor -	106 16 30		Sourton Tor -	12 48 30	
Cut Hill -	79 47	11509	Black Down -	15 44	11838
Beeryonder Tor -	55 17 0	13779	Sourton Tor -	9 12	20077
Siddever Tor -	44 56 0		Lydford Steeple -	155 4 0	
Cocks Tor -	1 29 50	21394	Black Down -	5 10	31699
Hessary Tor -	5 50	14212	Sourton Tor -	97 8	287
Peak Beacon -	52 40 10		Sourton Steeple -	1077 42	
Cut Hill -	48 7 10	10999	Sourton Tor -	87 58 0	20071
Tes Tor -	24 52 30	19469	Sourton Steeple -	83 50 30	20173
Hewdeck Staff -	107 0 20		Lydford Steeple -	8 11 30	
Cut Hill -	36 31 0	20411	Sourton Tor -	39 31 40	9805
Tes Tor -	54 41 50	14883	Sourton Steeple -	126 54 10	7804
Great Links Tor	88 47 10		Bridestow Steeple -	13 31 10	

Names of Stations and intersected Objects.	Angles for Calculation	Distances in Feet.	Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.
Black Down - - -	12 36 0	11526	Hurlstone Station - -	28 5	13890
Cocks Tor - - -	18 55 50	7750	Leather Tor - -	59 34	7584
St. Peter Tavy Steeple	148 28 10		Sheepstor Steeple -	92 21	
Black Down - - -	14 56 10	3078	Cocks Tor - -	115 4 50	16769
Cocks Tor - - -	10 56 10	10974	Hessary Tor - -	32 9	28541
St. Mary Tavy Steeple	154 7 40		Whitchurch Steeple -	32 46 10	
Morwell Down - -	16 5 40	27084	Morwell Down - -	13 38 40	11785
Cocks Tor - - -	75 22 30	7760	Cocks Tor - - -	9 32 50	16765
St. Peter Tavy Steeple	88 31 50		Whitchurch Steeple -	156 48 30	
Morwell Down - -	22 12 50	28856	St. Budeaux - - -	74 53 10	11945
Cocks Tor - - -	83 22 10	10983	Kit Hill - - -	14 35 50	45754
Mary Tavy Steeple -	74 25 0		Stray Hill - - -	92 31 0	
Morwell Down - -	20 1 20	11921	Stray Hill - - -	15 27 0	6432
Cocks Tor - - -	13 40 10	17271	St. Budeaux - - -	16 36 40	5994
Tavistock Steeple -	146 18 30		Witley - - -	147 56 20	
Cocks Tor - - -	32 9	29999	Stray Hill - - -	4 20 0	5123
Leather Tor - - -	101 32 50	16294	Witley - - -	16 7 30	1380
Hurstone Rock - -	46 18 10		Tamerton Foliot Steeple	159 22 30	
Hurlstone Rock - -	36 20 50	18430	Stray Hill - - -	100 12 10	8098
Leather Tor - - -	82 42 50	11048	Witley - - -	45 22 20	11198
Sampford Spiney Steeple	60 56 20		Beere Fennis Steeple -	34 25 30	
Hurlstone Rock - -	27 40 10	14719	Triangles for the Survey of Cornwall.		
Leather Tor - - -	64 31	7572			
Sheepstor Steeple -	87 48 50		Stray Hill - - -	42 29 0	15625
Leather Tor - - -	68 56 50	11051	St. Budeaux - -	87 43 0	10561
Mary Tor - - -	41 8 10	15678	Landulph - - -	49 48 0	
Sampford Spiney Steeple	69 55 0		Kit Hill - - -	28 46 40	181
Hurlstone Rock - -	20 33 10	12007	St. Stephen's - -	0 5 45	52081
Leather Tor - - -	39 50 50	6579	Kit Hill New Station -	151 7 35	
Walkhampton Steeple -	19 36 0		Kit Hill New Station -	8 16 10	37501
Cocks Tor - - -	16 55 50	19882	St. Stephen's - -	19 48 50	15913
Leather Tor - - -	61 42 0	6576	Bare Head - - -	151 55 0	
Walkhampton Steeple -	01 22 10		Bare Head - - -	82 25 10	29481
Leather Tor - - -	4 57	16097	St. Stephen's - -	67 38 10	51600
Hurlstone Rock - -	9 31	1412	Bradwood Widger Steeple	29 56 40	
Hurlstone Station -	35 32		Bare Head - - -	101 35 0	30888
Hurlstone Rock - -	47 1 10	8161	St. Stephen's - -	53 50 20	37478
Hurlstone Station -	24 50 0	7292	Stowford Steeple	24 34 40	
Meavy Steeple - -	8 8 30				

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Bare Head -	158 28 0	11399	Kit Hill New Station	34 18 30	31245
St. Stephen's -	8 58 0	26844	Calstone Down -	128 58 20	22653
Bradstone Steeple -	12 34 0		Lamerton Steeple	16 43 0	
Bare Head - -	144 35 10	15118	Kit Hill New Station	83 54 0	12900
St. Stephen's -	17 14 20	29562	Calstone Down -	51 32 10	16381
Kelley Steeple - -	18 10 30		Beverton Down -	44 33 50	
Bare Head - -	146 32 10	26930	Beverton Down -	150 1 20	22735
St. Stephen's -	21 9 10	41151	Calstone Down -	17 28 50	37821
Stoke Clymesland Steeple	12 18 40		Landrake Steeple	12 30 0	
Bare Head - -	63 29	25319	Beverton Down -	36 5 50	19058
St. Stephen's - -	78 30	23120	Calstone Down -	85	11271
Lewannick Steeple -	38 0 50		Calstone Steeple -	58 54 10	
Kit Hill - -	26 14 20	44677	Beverton Down -	83 32 0	23498
St. Stephen's -	58 42 10	23116	Kit Hill New Station	66 17 30	25501
Lewannick Steeple -	95 3 30		St. Ive Steeple -	30 10 30	
Kit Hill - -	31 54 40	59692	Kit Hill Old Station	29 11 14	25390
St. Stephen's - -	87 27 0	31588	Carraton Hill -	47 42 50	16736
Bradwood Widger Steeple	60 38 20		St. Ive Steeple -	103 5 56	
Kit Hill - -	1 8 20	49881	Beverton Down -	78 1 0	43303
St. Stephen's -	24 9 10	2423	Kit Hill New Station	84 43 40	42539
St. Stephen's Steeple	154 42 30		St. Clear Steeple -	17 15 20	
Kit Hill New Station -	40 42 30	11560	Beverton Down -	35 52 30	23897
Brent Tor - -	12 19 20	35330	Kit Hill New Station	111 46 40	15424
Calstone Down -	126 58 10		South Hill Steeple	29 20 50	
Kit Hill New Station -	93 12 40	35363	Kit Hill Old Station	19 31 2	19522
Calstone Down -	69 1 0	37814	Carraton Hill -	15 22 32	15494
Landrake Steeple -	17 46 20		South Hill Steeple	145 6 26	
Kit Hill New Station -	97 16 30	36577	Beverton Down -	40 49 50	46472
Calstone Down -	65 57 0	39732	Kit Hill New Station	126 1 5	37699
Lawton Steeple -	16 46 30		North Hill - -	12 58 20	
Kit Hill New Station -	86 38	26006	Beverton Down -	146 59 50	11106
Calstone Down -	68 52 10	27832	Kit Hill New Station	15 14 0	23023
Dunterton Steeple -	24 29 50		Pillaton Steeple -	17 46 10	
Kit Hill New Station -	12 40 20	11029	Kit Hill New Station	21 27	21217
Calstone Down -	32 46 0	18803	Calstone Down -	136 32 20	11280
Stoke Clymesland Steeple	34 33 40		Calstone Steeple -	22 0 40	
Kit Hill New Station -	50 49 20	18946			
Calstone Down - -	91 35 30	14692			
Sydenham Steeple -	37 35 10				



Names of Stations and inter- sected Objects	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected objects.	Angles for Calculation	Distances in Feet.
Liskeard Steeple from Bindown 22885 feet.			Bindown - - -	14 59	27865
Liskeard Steeple -	36 19 4	12391	St. Cleer Steeple -	40 51 30	11012
Bindown - -	29 38 20	14844	Lurret on the West end of Trengrove House	124 9 28	
St. Kean Steeple -	114 2 0		Carradon Hill -	59 33 13	25594
Liskeard Steeple -	37 33 0	17888	Liskeard Steeple -	68 19 0	23743
Bindown - -	51 23 50	13950	Berry Down - -	52 7 47	
Centre of Coldrinick House	91 3 10		St. Cleer - - -	47 9 0	23739
St. Cleer Steeple -	21 50 0	13949	Bindown - - -	42 19 27	25848
Bindown - -	48 12 56	27967	Querthock Steeple -	90 31 33	
Coldrinick House -	109 57 4		Carradon Hill -	37 28 52	37353
Liskeard Steeple -	26 36 30	13979	Kit Hill - - -	8 32 43	23041
Bindown - -	31 5 0	12127	Millaton Steeple -	61 58 25	
Clicker Tor - -	22 13 50		Carradon Hill -	28 16 52	25330
Liskeard Steeple -	20 1 45	13955	Kit Hill - - -	47 11 4	16361
Menhiniot Steeple -	59 11 20	4873	Madson Bury - -	104 32 4	
Clicker Tor - -	100 46 55		Carradon Hill -	48 27 37	47177
Liskeard Steeple -	34 1 40	13800	Kit Hill - - -	85 31 43	35177
St. Cleer Steeple -	82 23 24	7791	Landrake Steeple -	45 0 10	
East Chimney of Fosnooth House - - -	63 34 56		Kit Hill - - -	30 21 4	39118
Liskeard Steeple -	118 44 40	13790	Landrake Steeple -	85 23 0	19551
St. Kean Steeple -	32 26 20	23055	Padderbury Beacon -	64 15 2	
Fosnooth House -	28 40 0		Padderbury Beacon -	50 24 30	8550
St. Cleer Steeple -	33 50 30	31869	Landrake Steeple -	24 26 50	15847
Liskeard Steeple -	128 43 4	22548	Tree near Treacle Foot	105 9 0	
Padderbury Beacon -	17 40 16		Landrake - - -	52 12 0	9961
Liskeard Steeple -	12 15 0	16359	Treacle-Tree - -	38 56	12525
Bindown New Station -	67 52 40	22538	Ways Wandra House -	88 52 0	
Padderbury Beacon -	69 52 40		St. Stephen's Down -	18 41 30	20426
N. B. In the last Triangle the distance be- tween Liskeard Steeple and Bindown New Sta- tion is taken at 22845 feet.			Kit Hill - - -	21 9 35	26126
Duloe - - -	27 56 0	20805	Dunterton Steeple -	140 8 55	
Bindown Old Station	116 2 0	10877	St. Stephen's Down -	58 42 7	22966
Penhale Signal Staff	35 42 0		Kit Hill - - -	25 57 32	44833
Liskeard Steeple -	42 16 0	23776	Lewannick Steeple -	95 20 21	
St. Cleer Steeple -	107 46 24	16793	Bindown - - -	52 28	10465
Berry Down - -	29 57 36		Penhale Signal Staff -	65 58	9436
			St. Martin's Steeple -	61 34 0	

Names of Stations and inter- sected Objects.	Angles for Calculation	Distances in Feet	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Bindown - - -	42 44 0	11698	Lansallos - - -	59 40 0	8059
St. Mart'n's Steeple -	76 44 0	8156	St. Veep Steeple -	30 45 0	13605
West Chimney of Trevors Farm House -	60 32 0		Gate near Pencarrow Point		
Bindown - - -	91 59 11	24932	St. Veep Steeple -	86 4 0	11951
St. Cleer Steeple -	34 36 0	43780	Lantagios Barrow -	46 22 0	16474
Summer Lane Head -	53 24 49		House at Castle Dor -	47 34 0	
Bindown - - -	25 10 30	25510	St. Veep Steeple -	41 56 0	22054
Landrake Steeple -	46 31 18	14954	Lantagios Barrow	105 58 3	15320
Clump of Trees near Pol- bathick - - -	108 18 12		Greber Head Signal Staff	32 5 30	
Bindown - - -	47 56 0	22448	St. Veep Steeple -	38 29 10	12313
Landrake Steeple -	42 16 0	24777	Greber Head Signal Staff	31 40 37	14593
St. German's Beacon -	89 48 0		Castle Dôr Station -	109 50 18	
Bindown - - -	11 27 30	23611	Greber Head - - -	18 20 0	14558
St. German's Beacon -	98 25 0	4742	Lanlivery - - -	14 58 0	17731
St. Winnowe Steeple -	70 7 30		Castle Dôr - - -	146 42 0	
St. German's Beacon -	51 48 30	25987	Greber Head - - -	38 35 0	13571
Bindown - - -	72 39 0	21390	Castle Dôr - - -	64 53 30	9347
House on Looe Island -	55 32 30		Warehouse on Par Sands	96 31 30	
Bindown - - -	24 51 30	14980	Greber Head - - -	37 25 0	19024
St. German's Beacon -	35 25 0	10866	Castle Dôr - - -	92 39 0	11572
Penhale Signal Staff -	119 43 30		St. Blaz-y Steeple -	42 56 0	
Bindown - - -	42 55 30	37087	Castle Dôr - - -	27 46 0	5316
Liskeard Steeple -	92 36 0	25617	St. Blazey Steeple -	52 31 0	5469
Broad Oak Station -	37 28 30		Par Sands Warehouse -	99 43 0	
Liskeard Steeple -	28 7 0	26834	Greber Head - - -	40 50 0	23127
Broad Oak Station -	81 35 0	12793	Castle Dôr - - -	100 56 30	15402
Bury Hill Beacon -	70 18 0		Prideaux Warren Steeple	38 13 30	
Liskeard Steeple -	117 29 52	26816	Greber Head - - -	115 13 0	19800
St. Cleer Steeple -	43 44 50	34400	Castle Dôr - - -	37 54 0	29161
Bury Hill Beacon -	18 45 18		Black Head - - -	26 53 0	
Lansallos Station - -	87 9 0	12077	Greber Head - - -	17 13 0	27423
Boconnoc Obelisk -	21 43 0	30886	Prideaux Warren -	110 42 0	8677
Lantagios Barrow -	71 8 0		Carngrey Rock -	32 5 0	
Lansallos - - -	49 48 0	12072	Prideaux Warren -	86 28 0	8080
St. Veep Steeple -	49 10 0	12188	Carngrey Rock -	44 40 0	11472
Lantagios Barrow -	81 2 0		Luxulian Steeple -	43 52 0	
			Prideaux Warren -	61 32 0	13896
			Luxulian Steeple -	83 12 0	12302
			Barrow on Carleddon Down	35 16 0	

Names of Stations and inter- sected Objects.	Angles for Calculation	Distances in Feet	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Bodmin Down -	43 41 0	18889	Bodmin Down -	111 27 0	6333
Lanlivery Steeple -	36 12 0	22090	Four Barrow Hill -	15 32 0	22009
The Highest Barrow on Four Barrow Hill -	100 7 0		Council Barrow -	53 1 0	
Bodmin Down -	37 33 0	10339	Bodmin Down -	81 42 0	13511
Lanlivery Steeple -	15 8 3	24126	Four Barrow Hill -	38 17 0	21580
Bodmin Beacon -	127 18 3		St. Belermine's Tor -	60 1 0	
Bodmin Down -	81 14 0	10297	Bodmin Down -	56 24 46	21923
Four Barrow Hill -	30 30 0	20097	Four Barrow Hill -	69 41 0	19475
Bodmin Beacon -	68 16 0		Warleggon Church -	53 54 14	
Bodmin Down -	45 21 0	9076	Bodmin Down -	134 13 54	21951
Four Barrow Hill -	27 18 0	14079	Hensbarrow -	14 5 30	64594
Castle Kenyoc -	107 21 0		Warleggon Church -	31 40 3	
Four Barrow Hill -	45 11 30	8729	Bodmin Down -	46 36 0	29009
Lanlivery Steeple -	21 14 0	17099	Four Barrow Hill -	91 0 0	20354
St. Nighton Station -	113 13 30		Direction Post, Crowland Cross -	42 24 0	
Four Barrow Hill -	37 45 30	16580	Bodmin Down -	78 21 33	21810
Lanlivery Steeple -	48 30 0	13586	Lanivet Station -	45 14 30	30082
St. Winnow Station -	93 44 30		St. Mabyn Steeple -	56 23 57	
Lanlivery Steeple -	27 16 0	13558	Bodmin Down -	93 49 15	21786
St. Nighton Station -	50 54 0	8003	Hensbarrow -	24 1 0	53413
St. Winnow Station -	101 50 0		St. Mabyn Steeple -	62 9 45	
St. Winnow Station -	47 59 0	9614	Bodmin Down -	42 44 0	29320
St. Nighton Station -	77 38 0	7314	Bodmin Beacon -	119 26 0	22852
Restormel Castle -	54 23 0		Barrow on St. Breock's Down -	17 50 0	
St. Winnow Station -	77 18 0	6089	St. Mabyn's Steeple -	42 48 0	25406
St. Nighton Station -	41 43 0	8927	Brownwilly -	33 49 0	31017
Lestwithiel Steeple -	61 1 0		St. Teath Steeple -	103 23 0	
Bodmin Down -	59 13 0	24743	Hensbarrow -	8 42 45	63990
Four Barrow Hill -	73 40 30	22150	St. Mabyn Steeple -	135 19 30	13787
Helmen Tor -	47 6 30		St. Kew Steeple -	35 57 41	
Bodmin Down -	93 17 0	25583	Bodmin Down -	144 58 39	28794
Four Barrow Hill -	51 26 50	32659	Hensbarrow -	13 7 5	72818
Lanivet Station -	35 16 10		St. Bruard Steeple -	21 54 16	
Bodmin Down -	12 59 0	6716	Hensbarrow -	4 17 46	65623
Bodmin Beacon -	21 41 0	4084	St. Mabyn Steeple -	157 42 24	12958
Bury Tower -	145 20 0		St. Tudy Steeple -	17 59 50	
Bodmin Down -	40 34 0	22332	Hensbarrow -	6 34 56	86530
Four Barrow Hill -	82 27 0	14650	Cadon Barrow -	31 47 57	18824
Chimney of Turnpike House -	56 59 0		St. Advent Steeple -	141 37 7	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation	Distances in Feet.
St. Bruard Steeple	12 13 0	19403	Brownwilly -	36 9	17123
Brownwilly -	53 49 0	5087	Tober - -	116 16	11250
Rough Tor -	113 58 0		Brocha Barrow	27 35	
St. Bruard Steeple	71 36	28682	Brownwilly -	24 2 0	17101
Brownwilly -	64 37	30124	Tober - -	134 13 0	9718
Carburrow -	43 47 0		Four-holes Cross	21 45 0	
St. Bruard Steeple	45 15 0	15642	Carradon Hill	105 49 10	26198
Brownwilly -	45 24 0	15601	Bindown -	26 54	55710
Ox Tor -	89 21 0		Brown Gilley	47 16 50	
St. Bruard Steeple	19 26	25692	Brownwilly -	24 0 0	26810
Brownwilly -	104 49	8842	Carradon Hill	24 40 0	26120
Tober -	55 45 0		Brown Gilley	131 20	
St. Bruard Steeple	37 57 30	11161			
Tober -	22 7 0	18234			
Carbilley Tor	119 55 30				

ART. V. *Secondary Triangles for the Survey of the Western Part of Cornwall, Plate V.*

The Distances serving as Base Lines to the following Triangles are,

Pertinney to	{ Sennen -	17520 feet
	{ Karnminnis -	41407
Karnbonellis to	{ Deadman - -	101084
	{ St. Erme Steeple - -	66303
	{ Karnminnis - -	71578
St. Agnes to	{ Hensbarrow -	97085
	{ Karnminnis -	84610
Hensbarrow to	{ St. Dennis Steeple -	15359
	{ St. Cubert Spire -	69141
	{ Deadman Signal Staff -	59696
	{ St. Breoc Stone -	56571
Lansallos to Bodmin Down	-	61497

Pertinney -	66 25 30	12751	Pertinney -	127 45 0	6090
Sennen Steeple	43 15 25	17054	Sennen Steeple -	12 46 10	21788
St. Buryan Steeple	70 19 5		Karngevény Station	39 28 50	
Pertinney - -	17 8 0	20077	Pertinney - -	21 55 0	26433
Sennen Steeple -	105 44 0	6145	Sennen Steeple -	125 22 0	12699
Bajester, New House	57 8 0		Karnkinnejack Rock	32 43 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Pertinney - -	14 46 0	24851	Pertinney - -	9 10 0	24592
St. Buryan Steeple -	150 41 0	12937	Karnminnis - -	12 53 0	17571
Titterdieu Signal Staff	14 33 0		Barrow near Karn Galver	157 57 0	
Sennen Steeple -	14 27 0	16284	Pertinney - -	0 7 30	41469
St. Buryan Steeple -	72 27 0	4262	Karnminnis - -	124 29 0	109
Lear Farm -	93 6 0		Karn of Stones near Karn- minnis - -	55 23 30	
Sennen Steeple -	42 59 0	17512	Pertinney - -	9 10 0	24593
St. Buryan Steeple -	70 26 0	12671	Karnminnis - -	12 53 0	17571
Pertinney Fire Beacon	66 35 0		Karn near Karn Galver	157 57 0	
Sennen Steeple -	79 52 0	12857	Pertinney - -	13 20 0	38243
St. Buryan Steeple -	40 33 0	19468	Rogers Tower - -	104 5 0	9093
Levan Signal Staff -	59 35 0		Ludgvan Steeple - -	62 35 0	
Sennen Steeple -	130 49 0	5632	Pertinney - -	68 14 30	12113
St. Buryan Steeple -	11 37 0	21169	Rogers Tower - -	20 14 30	32517
Pendennick Signal Staff	37 34 0		Karnkinnejack Rock -	91 31 0	
St. Buryan Steeple -	98 29 0	12944	Pertinney - -	36 14 0	22578
Levan Signal Staff -	30 55 0	24918	Rogers Tower - -	38 29 0	18678
Titterdieu Signal Staff -	50 36 0		Chume Hill middle Karn	105 47 0	
St. Buryan Steeple -	8 32 0	11192	Pertinney - -	20 1 0	21228
Levan Signal Staff -	11 11 0	8562	Rogers Tower - -	25 46 0	16715
Tredrinnon Farm -	160 17 0		Steam Engine, Chume Hill	134 13 0	
Sennen Steeple - -	50 57 0	5641	Pertinney - -	14 31 40	25307
Levan Signal Staff -	25 13 0	10283	Rogers Tower - -	38 39 0	10968
Pendennick Signal Staff	103 50 0		Mulfra Cromleche -	126 49 20	
Sennen Steeple -	82 22 0	4920	Pertinney - -	29 26 0	39347
Levan Signal Staff -	21 47 0	13141	Rogers Tower - -	87 50 0	19349
Stone, Land's End -	75 51 0		St. Michael's Mount -	62 44 0	
Levan Signal Staff -	5 14 0	12790	Pertinney - -	21 39 0	22565
Stone, Land's End -	70 53 0	123	Mulfra Cromleche -	52 44 0	10461
Arm and Knight's, Land's End	103 53 0		Chume Hill Karn -	105 37 0	
Sennen Steeple -	93 47 0	19173	Pertinney - -	86 38 0	12749
Stone, Land's End -	72 5 0	20107	Ludgvan Steeple -	18 45 0	39595
The Sisters - -	14 8 0		St. Buryan Steeple -	74 37 0	
Pertinney - -	16 14 0	35000	Pertinney - -	36 20 0	24067
Karnminnis - -	51 25 40	12515	Ludgvan Steeple -	37 6 0	23640
Rogers Tower, Castle Dennis - -	112 20 20		St. Paul's Steeple -	106 34 0	
Pertinney - -	48 4 0	68826	St. Buryan - -	23 28 0	18717
Karnminnis - -	95 7 10	51406	Ludgvan Steeple -	18 23 0	23633
Tregonning Signal Staff	36 48 50		St. Paul's Steeple -	138 9 0	

Names of Stations and inter- sected Objects.	Angles for Calculation	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation	Distances in Feet.
St. Buryan Steeple	67 55	12445	Pertinney - -	24 34	10864
St. Paul's Steeple	39 26	18171	Karnennis - -	38 47	7210
Beacon Hill Karn	72 39		Karn East of Karnkinnejae	116 39	
St. Buryan Steeple	8 52	12541	Pertinney - -	122 33	17520
Beacon Hill Karn	88 6 0	1934	Karnennis - -	30 38	28974
St. Creed Steeple	83 2		Sennen Steeple - -	26 48 2	
Ludgvan Steeple -	50 46	10907	Sennen Steeple - -	23 49	20328
St. Paul's Steeple -	26 47	18749	Karnennis - -	38 20 5	13231
St. Michael's Mount	102 27		Cape Cornwall - -	117 50 1	
Ludgvan Steeple -	61 45	9023	Ludgvan Steeple - -	51 0	20509
St. Paul's Steeple	22 19	20933	St. Michael's Mount -	97 9	16063
Marazion Staff -	95 56		Gwavias Battery - -	31 51	
Ludgvan Steeple -	77 7	15561	Ludgvan Steeple - -	42 57	26316
St. Paul's Steeple	36 57	25235	St. Michael's Mount -	14 59	19782
Perran St. Uthnoe Steeple	65 56 0		Mousehole Battery -	22 4	
Ludgvan Steeple	72 22 30	23052	Ludgvan Steeple - -	61 11 3	13889
St. Paul's Steeple	52 50 0	27570	St. Michael's Mount -	70 54	12879
Caddan Point -	54 47 30		Penzance Spire - -	47 54 3	
Pertinney - -	39 51	10267	St. Paul's Steeple - -	3 47	21414
Karnegwey - -	05 14	6818	St. Michael's Mount -	51 39	2976
St. Just Steeple -	34 55 0		Marazion Chapel - -	24 34	
Pertinney - -	49 6	9286	St. Paul's Steeple - -	19 39 0	46452
Karnegwey - -	80 55	7019	St. Michael's Mount -	48 0	29477
Karnbesavern -	40 59 0		Tregonning Signal Staff	12 21	
Pertinney - -	34 49	15501	St. Paul's Steeple - -	37	16671
Chume Hill - -	41 56	13244	St. Michael's Mount -	81 22	11655
Karnennis - -	103 15 0		Gulval Steeple - -	80 47	
Pertinney - -	51 4 0	21224	St. Paul's Steeple - -	21 42	17587
Karnennis - -	82 32 0	16605	St. Michael's Mount -	69 41	6934
Steam Engine, Chume Hill	46 24 0		Long Rock, Stone -	68 37 0	
Pertinney - -	34 38 0	10243	Gwavias Battery - -	41 35	22865
Karnennis - -	39 27 30	9160	Ludgvan Steeple - -	7 21	15533
St. Just Steeple -	105 54 30		Perran, St. Uthnoe Steeple	61 4 0	
Pertinney - -	43 52	9259	Gwavias Battery	58 11 0	25864
Karnennis - -	36 1	10912	Ludgvan Steeple	72 38 0	23027
Karnbesavern -	100 7 0		Cuddan Point	49 11 0	
Pertinney - -	49 47 0	13824	Gwavias Battery	19 43 0	7282
Karnennis - -	58 5 0	12436	Ludgvan Steeple	10 12 0	3872
Flagstaff near St. Just	72 8 0		Penzance Spire	150 5 0	

Names of Stations and inter- sected Objects.	Angles for Calculation	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation	Distances in Feet.
Gwavias Battery -	0 21 0	14436	Pertinney -	49 37 0	35025
Ludgvan Steeple -	14 38 0	6369	St. Paul's Steeple -	87 3 0	20714
Long Rock Stone -	158 58 0		Rogers Tower -	43 20 0	
Gwavias Battery -	20 50 0	6708	Rogers Tower -	81 54 0	10982
Long Rock Stone -	16 17 0	8508	St. Paul's Steeple -	23 22 0	27413
Penzance Battery -	142 53 0		Mulfra Cromleche -	74 44 0	
Gwavias Battery -	5 6 0	18622	Rogers Tower -	48 45 0	29569
St. Michael's Mount -	146 20 0	2986	St. Paul's Steeple -	72 1 0	23373
Marazion Chapel -	28 34 0		Barrow east of Pertinney	59 14 0	
Gwavias Battery -	19 37 0	26838	Rogers Tower -	30 33 0	14684
St. Michael's Mount -	135 39 0	12889	St. Paul's Steeple -	27 57 0	15851
Acton Castle -	24 44 0		Madern Steeple -	121 30 0	
Tregonning Signal Staff	9 48 0	42098	Rogers Tower -	125 51 0	11559
Karnminnis -	35 50 0	12242	St. Paul's Steeple -	15 38 0	34708
Knill's Monument -	134 22 0		Trecombe Hill -	38 31 0	
Tregonning Signal Staff	33 42 0	29498	Rogers Tower -	37 23 0	29388
Karnminnis -	31 21 0	31458	St. Paul's Steeple -	79 20 0	18156
St. Michael's Mount -	114 57 0		Beacon Hill, Karn	63 17 0	
Pertinney -	5 42 0	51422	Rogers Tower -	106 45 0	12506
St. Michael's Mount -	156 58 0	12877	Barrow east of Pertinney	19 51 0	35268
Acton Castle -	17 40 0		Karnminnis -	53 24 0	
Tregonning Signal Staff	43 30 0	42084	Rogers Tower -	51 35 0	10348
St. Michael's Mount -	92 2 0	28987	Karnminnis -	53 8 0	10224
Knill's Monument -	44 28 0		Trenk Hill -	75 17 0	
Rogers Tower -	37 6 0	29400	Rogers Tower -	73 31 0	10965
St. Michael's Mount -	103 1 0	18202	Karnminnis -	48 12 20	14103
Highest point of Cle- ment's Isle -	39 53 0		Mulfra Cromleche -	58 16 40	
Rogers Tower -	81 13 0	11549	Rogers Tower -	13 36 0	13644
St. Michael's Mount -	32 59 0	20965	Karnminnis -	103 11 0	32951
Trecombe Hill Middle Karn -	65 48 0		Watch, highest West Karn	63 13 0	
Tregonning Signal Staff	34 26 0	43157	Rogers Tower -	49 25 20	15829
St. Paul's Steeple -	66 1 0	26710	Karnminnis -	79 34 0	12224
Rogers Tower -	79 33 0		Knill's Monument -	51 0 40	
Tregonning Signal Staff	113 1 0	54856	Karnminnis Karn -	19 50 0	18803
St. Paul's Steeple -	36 38 0	84615	Pertinney -	15 1 0	24622
Windmill near the Lizard	30 21 0		Karn Galver, South Karn	145 9 0	
			Karnminnis -	24 0 0	28271
			Knill's Monument -	139 46 30	17806
			Vicarage St. Earth -	16 13 30	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects	Angles for Calculation.	Distances in Feet.
Karnminnis - -	102 36 0	5773	St. Ann's Summer House	53 23 0	13559
Knill's Monument -	22 40 0	14621	Karnbreh Karn -	24 7 0	26617
White Down Barrow -	54 44 0		West Barrow on Two Barrow Down -	102 30 0	
Karnminnis - -	104 31 0	109	Gwynier Steeple -	20 4 0	18685
Knill's Monument -	0 29 40	12260	St. Ann's Summer House	9 19 0	39602
Karnminnis Karn -	74 59 20		Camborne Steeple -	150 37 0	
Karnminnis -	27 43 0	35650	St. Ann's Summer House	16 54 0	32388
Knill's Monument -	139 40 0	25444	Camborne Steeple -	47 33 0	12760
Godicvy Island, highest Point - - -	12 57 0		Karnbreh Karn -	115 33 0	
Rogers Tower - -	36 29 20	10262	Karnbreh Karn -	80 5 0	11732
Knill's Monument -	38 49 40	9733	Camborne Steeple -	47 6 0	15777
Towednack Steeple -	104 41 0		Illogan Steeple -	52 49 0	
St. Agnes Beacon -	113 55 0	189	Karnbreh Karn -	84 41 0	20339
Karnminnis - -	0 7 0	84687	Camborne Steeple -	61 46 0	22988
St. Ann's Summer House	65 58 0		Poltowen Signal Staff -	33 33 0	
St. Ann's Summer House	21 43 0	56626	Camborne Steeple -	19 59 0	37307
Karnminnis - -	33 9 0	38316	St. Ann's Summer House	70 24 0	13534
Gwynier Steeple -	125 8 0		West Barrow on Two Barrow Down -	89 37 0	
St. Ann's Summer House	4 21 0	74036	Camborne Steeple -	64 48 0	5986
Karnminnis - -	27 20 0	12230	Gwynier Steeple -	8 33 0	23780
Knill's Monument -	148 19 0		Karnbreh House -	27 32 0	
St. Ann's Summer House	47 56 0	32376	Camborne Steeple -	91 30 0	12086
Karnminnis - -	20 53 0	67424	Gwynier Steeple -	32 27 0	22517
Karnbreh, highest Karn	111 11 0		Ruskeage Down -	56 3 0	
St. Ann's Summer House	42 17 0	31605	Camborne Steeple -	83 3 0	17532
Karnminnis - -	20 30 0	68402	Gwynier Steeple -	46 25 0	24026
Karnbreh Castle -	110 13 0		Crowan Beacon -	50 32 0	
Knill's Monument -	40 9 0	26119	Gwynier Steeple -	41 4 0	23770
St. Ann's Summer House	17 12 0	56634	Ruskeage Down -	73 36 0	16278
Gwynier Steeple -	122 33 0		Karnbreh House -	65 20 0	
St. Ann's Summer House	8 2 0	27106	St. Ann's Summer House	69 11 0	20669
Karnbreh Karn -	34 23 0	6708	West Barrow - -	72 13 0	20289
Redruth, Market House	137 35 0		Perran Steeple - -	38 36 0	
St. Ann's Summer House	27 21 0	30447	St. Ann's Summer House	31 27 0	17919
Karnbreh Karn -	69 8 0	14970	West Barrow - -	100 37 0	9512
Lord de Dunstanville's House - -	83 31 0		North Barrow on Four Barrow Down -	47 56 0	



Names of Stations and inter- sected Objects	Angles for Calculation	Distances in Feet	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
St. Ann's Summer House	85° 11' 0"	33407	Mulfra Cromleche -	111 54 0	10050
North Barrow -	65 34 0	36564	Karnminnis Karn -	27 27 0	20229
Carter's Rock -	29 15 0		Karn Galvei North Karn	40 39 0	
St. Ann's Summer House	53 26 0	25293	Rogers Tower -	55 50 0	8715
North Barrow -	81 59 0	20515	Mulfra Cromleche -	49 54 0	9389
St. Days Engine House	44 35 0		Frear Farm, New House	74 30 0	
St. Ann's Summer House	48 19 0	3626	Karnminnis -	30 6 0	38316
North Barrow -	9 54 0	15752	Tregonning Signal Staff	46 28 0	26506
St. Agnes Spire -	121 47 0		Gwynier Steeple -	103 26 0	
St. Ann's Summer House	65 34 0	30801	Karnminnis -	9 15 30	33848
North Barrow -	79 31 0	28519	Tregonning Signal Staff	10 51 0	18805
Large Stone, Karnmarth Barrow -	34 55 0		St. Hilary Spire -	153 54 30	
West Barrow -	123 4 0	13697	Karnminnis -	8 56 30	43783
North Barrow -	34 2 30	20505	Tregonning Signal Staff	39 50 30	10622
Engine House, St. Days	22 53 30		East House at Karnegey	131 13 0	
Mulfra Cromleche -	22 53 0	7740	Tregonning Signal Staff	49 39 0	10624
Karnminnis -	23 21 0	7593	Kill's Monument -	12 57 0	30141
Gundry Karn -	133 46 0		East House at Karnegey	117 24 0	
Gundry Karn -	0 47 40	7621	Tregonning Signal Staff	5 39 0	6215
Karnminnis -	104 22 0	108	East House at Karnegey	7 51 0	4480
Karnminnis Karn -	74 50 20		St. Gernowe Steeple -	166 30 0	
Gundry Karn -	129 21 0	9131	Tregonning Signal Staff	22 6 0	7719
Karnminnis Karn -	27 46 0	15156	East House, Karnegey	14 28 0	5526
Rock on the Coast near Zennor -	22 53 0		Tiewagias Farm -	105 26 0	
Gundry Karn -	41 26 0	3075	Tregonning Signal Staff	41 49 0	14611
Karnminnis Karn -	20 57 0	5692	East House, Karnegey -	91 31 0	9746
Karn, Zennor Hill -	117 37 0		Girling Farm -	46 37 0	
Rogers Tower -	49 25 0	12623	Tregonning Signal Staff	128 33 0	5492
Knill's Monument -	51 32 0	12244	Gwynier Steeple -	8 10 0	30235
Karnminnis Karn -	79 3 0		St. Breage Steeple -	43 17 0	
Rogers Tower -	73 32 0	11006	Gwynier Steeple -	45 41 30	19129
Karnminnis Karn -	48 0 0	14203	St. Breage Steeple -	39 3 0	21727
Mulfra Cromleche -	58 28 0		Crowan Steeple -	95 15 30	
Mulfra Cromleche -	113 3 0	7925	Tregonning Signal Staff	25 50 0	10613
Karnminnis Karn -	22 51 0	18779	St. Breage Steeple -	131 17 0	6154
Karn Galvei, South Karn	44 6 0		Sithney Steeple -	22 53 0	
			Karnminnis -	30 34 0	51400
			Karnbohellis -	43 44 0	37811
			Tregonning Signal Staff	105 20 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Karnminnis - -	27 5 0	44508	Karnminnis -	32 37 0	84696
Karnbonellis - -	32 23 0	37835	Karnbonellis -	89 42 0	45653
Godolphin Hill -	120 32 0		St. Ann's Summer House	57 41 0	
Karnbonellis - -	22 17 0	20898	Karnbonellis -	64 27 0	56380
Tregonning Signal Staff	23 13 0	20101	St. Ann's Summer House	67 14 40	55160
Saundry Hill Mine -	134 39 0		St. Michael Penkeville	48 18 20	
Karnbonellis - -	43 4 50	66343	Karnbonellis -	22 54 0	243
Tregonning Signal Staff	103 13 15	46548	St. Ann's Summer House	0 7 10	45431
Park Loughs Signal Staff	33 41 55		Barrow Karnbonellis -	156 58 50	
Karnbonellis - -	110 35 0	249	Karnbonellis -	62 41 30	37509
Tregonning Signal Staff	0 21 20	37900	St. Ann's Summer House	49 44 30	43673
Karnbonellis Barrow -	69 43 50		Barrow close, Spry's Plan- tation Kea - -	67 34 0	
Karnbonellis -	22 16 30	56379	Karnbonellis Barrow -	113 11 0	14643
St. Erme Steeple -	56 31 30	25620	St. Ann's Summer House	14 54 0	52744
St. Michael Penkeville	101 12 0		Stone, Stithians Down -	52 55 0	
St. Michael Penkeville	44 50 0	22762	Karnbonellis Barrow -	39 14 0	11980
St. Erme Steeple -	59 26 0	18638	Stone, Stithians Down -	54 43 0	9282
St. Probus Steeple -	75 44 0		St. Stithians Steeple -	86 3 0	
St. Michael Penkeville	13 51 0	31419	St. Michael Penkeville	97 45 0	22754
St. Probus Steeple -	135 50 0	10794	St. Ann's Summer House	21 10 0	62442
Ladock Steeple -	30 19 0		St. Probus Steeple -	61 5 0	
St. Probus Steeple -	81 22 0	26426	St. Michael Penkeville	53 51 0	38166
St. Erme Steeple -	60 41 0	29964	St. Ann's Summer House	43 21 0	44899
Trevidown - -	37 57 0		Michaels Down Barrow	82 48 0	
Trevidown - -	64 18 0	11533	Michaels Down Barrow	17 26 0	54396
St. Probus Steeple -	25 52 30	23812	St. Michael Penkeville -	130 7 0	21310
St. Stephen's Steeple -	89 49 30		St. Vryan Beacon -	32 27 0	
Trevidown - -	13 24 0	16807	Michaels Down Barrow	23 52 0	26715
St. Probus Steeple -	21 8 0	10803	St. Michael Penkeville	38 12 0	17479
Ladock Steeple -	145 28 0		Kenwyn Steeple -	117 56 0	
Trevidown - -	10 18 0	26425	Karnbonellis - -	87 21 0	246
St. Probus Steeple -	84 50 0	4744	St. Michael Penkeville	0 15 0	56368
Trewithen House -	84 52 0		Karnbonellis Barrow	92 24 0	
Trevidown - -	32 35 0	46555	St. Michael Penkeville	39 29 0	27503
St. Probus Steeple -	117 3 0	28151	Karnbonellis Barrow -	26 27 0	39262
St. Michael Carhais Steeple	30 22 0		Three mile stone from Truro, towards Red- ruth - -	114 4 0	
Trevidown - -	45 15 0	51209			
St. Probus Steeple -	104 49 30	37620			
St. Goran Steeple -	29 53 30				

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
St. Michael Penkeville	13 5 0	47744	Saundry Hill -	19 58 0	10821
Karnbonellis Barrow -	47 35 0	14640	Tregonning Signal Staff	20 24 30	10596
Stone, Stithians Down	119 20 0		Sithney Steeple -	139 37 30	
St. Michael Penkeville	145 48 0	22764	Saundry Hill - -	29 33 0	13769
Karnbonellis Barrow -	9 39 20	76288	Karnbonellis -	37 17 0	11210
St. Probus Steeple -	24 32 40		Crowan Beacon -	113 10 0	
Karnbonellis Barrow -	8 17 0	81437	Saundry Hill -	20 51 0	19289
St. Probus Steeple -	110 10 0	12500	Karnbonellis -	67 18 0	7442
Tregonny Steeple -	61 33 0		Hangman Hill Barrow	91 51 0	
Knill's Monument -	7 6 30	10916	Saundry Hill - -	52 34 0	49322
Gwynier Steeple -	5 3 0	15349	Karnbonellis - -	12 20 0	16323
Lelant Steeple -	167 50 30		St. Wendron Steeple -	115 5 30	
Knill's Monument -	6 26 0	16075	Tregonning Signal Staff	17 54 0	35769
Gwynier Steeple -	10 4 0	10304	Park Loughs Signal Staff	41 18 30	16654
Phillack Steeple -	163 30 0		Cury Steeple - -	120 47 30	
Knill's Monument -	88 25 0	8373	Cury Steeple - -	36 53 0	14571
Gwynier Steeple -	17 55 0	27207	Tregonning Signal Staff	19 56 0	25051
St. Ive's Battery -	73 40 0		Direction Post, Helston Down - -	123 11 0	
Knill's Monument -	93 56 0	6129	Cury Steeple - -	131 25 30	15681
Gwynier Steeple -	12 58 30	27235	Tregonning Signal Staff	13 28 20	48068
St. Ive's Steeple -	73 5 30		Dry Tree - -	32 6 10	
Knill's Monument -	34 53 0	34712	Park Loughs Signal Staff	36 17 0	25625
Gwynier Steeple -	96 46 0	19991	Cury Steeple - -	104 47 0	15084
Godolphin Hill -	48 21 0		Dry Tree - -	38 56 0	
St. Ive's Steeple -	160 1 0	2358	Cury Steeple - -	84 20 6	6828
Knill's Monument -	5 31 0	8384	Dry Tree - -	24 20 30	16487
St. Ive's Battery -	14 28 0		Mullyan Steeple -	71 13 30	
St. Ive's Steeple -	71 23 0	16972	Cury Steeple - -	97 34 0	14558
Knill's Monument -	87 28 0	16099	Dry Tree - -	39 21 0	22761
Phillack Steeple -	21 9 0		Direction Post, Helston Down - -	43 5 0	
St. Ive's Steeple -	52 30 0	13513	Park Loughs Signal Staff	46 42 0	30608
Knill's Monument -	101 4 0	10924	Dry Tree - -	78 15 0	22753
Lelant Steeple -	26 26 0		Direction Post, Helston Down - -	55 3 0	
St. Ive's Steeple -	123 10 0	21568	Direction Post -	43 44 0	21379
Knill's Monument -	45 12 0	25445	Dry Tree - -	63 41 0	16488
Godrevy Island, highest Point	11 38 0		Mullyan Steeple -	22 35 0	
St. Ive's Steeple -	13 19 0	1825			
Knill's Monument -	5 31 0	4373			
Tregonner Castle -	161 10 0				

Names of Stations and Intersected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and Intersected Objects.	Angles for Calculation.	Distances in Feet.
Direction Post, Helston	° ' "	'	Dry Tree - -	24 12 0	28634
Down - -	120 51 0	13158	Roscreage Fire Beacon	121 27 0	13753
Dry Tree - -	20 57 0	31593	Mawnan Steeple -	34 21 0	
Wendron Mine - -	38 12 0				
Tregonning Signal Staff	11 8 0	18343	Dry Tree - -	5 0 0	36778
Dircc. Post, Helston Down	24 50 0	8433	Stithians Down, Stone	25 10 0	7537
Helston Steeple -	144 2 0		Pillaston Karn -	149 50 0	
Tregonning Signal Staff	20 7 0	60652	Stithians Down, Stone	100 59 0	7545
Dry Tree - -	113 4 0	22673	St Michael Penkeville -	8 34 0	49723
Grade Steeple -	46 49 0		Pillaston Karn -	70 27 0	
Tregonning Signal Staff	18 7 0	53472	Dry Tree - -	6 32 0	38648
Dry Tree - -	99 24 0	16853	Pillaston Karn -	100 13 0	4686
Rum Major Steeple -	62 29 0		Mabe Steeple -	63 15 0	
Tregonning Signal Staff	14 38 30	61026	Pillaston Karn -	20 4 0	21820
Dry Tree - -	125 26 30	18932	Roscreage Fire Beacon	33 0 0	13746
Roscreage Fire Beacon	39 55 30		Mawnan Steeple -	120 56 0	
Tregonning Signal Staff	72 49 0	37913	Pillaston Karn -	70 36 0	14105
Dry Tree - -	44 43 0	51250	Roscreage Fire Beacon -	25 57 0	30405
Kurnbonellis Barrow -	63 8 0		St. Budock Steeple -	83 27 0	
Dry Tree - -	64 44 0	43160	Pillaston Karn -	80 51 0	43266
Roscreage Fire Beacon -	89 26 0	39304	Roscreage Fire Beacon	59 31 0	49567
Stithians Down, Stone	25 50 0		Geirance Spire -	89 38 0	
Dry Tree - -	49 4 0	8866	Pillaston Karn -	84 5 0	37560
Roscreage Fire Beacon	27 1 40	14740	Roscreage Fire Beacon	53 0 0	46780
St. Martin Steeple -	103 54 20		St. Teath Windmill -	42 55 0	
Dry Tree - -	18 42 0	21539	Pillaston Karn -	65 9 0	26538
Roscreage Fire Beacon	101 58 0	7059	Roscreage Fire Beacon	49 5 0	31868
St. Keverne Spire -	59 20 0		St. Dennis Castle -	65 40 0	
Dry Tree - -	34 59 0	18593	St. Dennis Steeple -	106 54 0	13479
Roscreage Fire Beacon	70 50 0	11286	Hensbarrow Beacon	33 47 0	23194
Manacka Steeple -	74 11 0		Castle Ann Dennis -	39 19 0	
Dry Tree - -	63 9 30	42321	Hensbarrow Beacon -	42 36 0	23199
Roscreage Fire Beacon	90 15 30	37761	Cubert Spire - -	16 47 0	54381
Haws Rock - -	26 35 0		Castle Ann Dennis -	129 37 0	
Dry Tree - -	65 44 30	26177	St. Agnes Beacon -	13 1 50	86805
Roscreage Fire Beacon -	71 10 0	25274	Hensbarrow Beacon -	57 36 40	23202
St. Constantine Steeple	43 5 30		Castle Ann Dennis -	109 21 30	
Dry Tree - -	60 33 50	36758	St. Agnes Beacon -	49 56 40	94651
Roscreage Fire Beacon	88 26 10	32025	Hensbarrow Beacon -	63 28 0	80978
Pillaston Karn -	31 0 0		Cow and Calf -	66 35 20	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
St. Agnes Beacon -	34 48 0	62415	Hensbarrow Beacon -	81 17 0	74936
Castle Ann Dennis -	44 59 0	50391	St. Breoc's Barrow -	71 24 50	78135
St. Probus Steeple -	100 13 0		St. Cubert Rock -	27 18 10	
Hensbarrow Beacon -	25 9 0	25699	Hensbarrow Beacon -	9 19 0	38390
Castle Ann Dennis -	90 21 0	10922	St. Breoc's East Barrow	104 39 0	6425
St. Wenne Steeple -	64 30 0		St. Breoc's West Barrow	66 2 0	
Hensbarrow Beacon -	25 5 0	7927	St. Breoc's East Barrow	38 54 0	6432
Castle Ann Dennis -	11 51 0	16365	St. Columb Major Steeple	12 27 0	18735
St. Roach Steeple -	143 4 0		West Barrow -	128 39 0	
Hensbarrow Beacon -	57 22 0	26753	St. Breoc's East Barrow	43 25 0	17439
Castle Ann Dennis -	68 44 0	24176	West Barrow -	117 30 0	13513
Trevidown -	53 54 0		St. Issey Steeple -	19 5 0	
Hensbarrow Beacon -	19 48 0	18356	St. Breoc's East Barrow	68 12 0	45583
Castle Ann Dennis -	46 23 0	8589	West Barrow -	103 56 0	43600
Belovely Down Barrow	113 49 0		Rock, mouth of Alan River -	7 52 0	
Cubert Spire -	34 32 0	14680	Karnbonellis -	91 34 36	72565
Castle Ann Dennis -	11 8 0	43099	Deadman -	35 8 2	126045
Newlyn Steeple -	134 20 0		Grade Steeple -	53 17 22	
Newlyn Steeple -	58 29 0	24391	Lansallos -	39 54 10	67329
Castle Ann Dennis -	34 48 0	36788	Bodmin -	77 9 30	44299
Mawgan Rock -	87 6 0		Roach Steeple -	62 56 20	
St. Agnes Beacon -	17 23 0	43843	Deadman Signal Staff	51 52 0	15512
Cubert Spire -	116 48 0	14675	Hensbarrow Beacon -	13 40 56	51582
Newlyn Steeple -	45 49 0		St. Michael Carhais Steeple	114 27 4	
Trevidown -	13 35 0	8205	Deadman Signal Staff -	8 39 0	42757
Castle Ann Dennis -	6 47 0	16315	Hensbarrow Beacon -	35 28 0	12897
Barrow near the Indian Queen -	159 38 0		Old Watch Barrow -	135 53 0	
Trevidown -	82 27 0	9516	Deadman Signal Staff -	9 36 0	40245
Castle Ann Dennis -	22 22 0	24791	Old Watch Barrow -	33 40 0	12107
St. Enodore Steeple -	75 11 0		Unanimity Mine -	136 44 0	
Stone, St. Breoc's Down	30 48 0	364	Deadman Signal Staff	40 35 0	43536
Hensbarrow Beacon -	0 17 40	36259	Old Watch Barrow -	59 29 0	32876
St. Breoc's Barrow -	148 54 20		St. Probus Steeple -	79 56 0	
Hensbarrow Beacon -	6 20 30	25728	St. Probus Steeple -	66 28 0	22579
St. Breoc's Barrow -	14 53 0	11059	Deadman Signal Staff	30 57 0	40252
Wenne Steeple -	158 46 40		Unanimity Mine -	82 35 0	
Hensbarrow Beacon -	38 30 50	34125	St. Probus Steeple -	10 46 0	37491
St. Breoc's Barrow -	65 47 0	23300	Deadman Signal Staff	46 15 0	9695
St. Columb Major Steeple	75 42 10		Goran Steeple -	122 59 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
St. Probus Steeple -	69 8 30	37477	Old Watch Barrow -	19 34 0	21408
Old Watch Barrow -	60 51 0	40099	St. Austle Steeple -	130 5 0	9371
Goran Steeple -	50 0 30		Penrice House -	30 21 0	
Unanimity Mine -	40 59 0	43077	Old Watch Barrow -	12 12 0	4255
Deadman Signal Staff -	74 42 0	29290	St. Austle Steeple -	5 9 0	10019
Veryan Beacon -	64 19		Mawnan, or Grey Rock	162 39 0	
Goran Steeple -	19 44 0	33674	Old Watch Barrow -	14 14 0	11029
Old Watch Barrow -	53 32 0	14138	St. Austle Steeple -	38 8 0	4391
St. Austle Steeple -	106 44		Mawnan Hill -	127 38 0	

ART. VI. *Secondary Triangles for the Survey of Dorsetshire.* Plate VI.

Wingreen - - -	65 42 0	22265	Wingreen - - -	63 31 30	36967
Bulbarrow - - -	18 43 0	63239	Trinity Steeple - - -	80 5 0	33592
Trinity Steeple, Shaftsbury	95 35 0		Hamilton Hill - - -	36 23 30	
Wingreen - - -	35 29 0	17274	Wingreen - - -	46 27 0	14207
Bulbarrow - - -	10 20 0	55899	Trinity Steeple - - -	39 32 0	16177
Melbury Hill - - -	134 11 0		Direction Post, Blandford Road - - -	94 1 0	
Wingreen - - -	56 45 0	33099	Wingreen - - -	8 58 0	33262
Bulbarrow - - -	28 32 0	57949	Trinity Steeple - - -	153 55 0	11794
Duncliffe Hill - - -	94 43 0		Duncliffe Hill - - -	17 7 0	
Wingreen - - -	56 54 0	59304	Wingreen - - -	41 27 0	45043
Bulbarrow - - -	53 34 0	61749	Trinity Steeple - - -	111 5 0	31956
Badbury Rings - - -	69 32 0		West Knoyle Steeple -	27 28 0	
Wingreen - - -	99 38 6	87990	Wingreen - - -	19 55 0	25081
Bulbarrow - - -	45 59 45	120602	Trinity Steeple - - -	98 45 0	8644
Ringwood Steeple - -	34 22 9		Kingsettles - - -	61 21 0	
Wingreen - - -	81 34 8	57251	Wingreen - - -	143 33 0	9152
Bulbarrow - - -	43 1 54	82989	Trinity Steeple - - -	10 24 0	30121
Horton Gazebo - - -	55 23 58		Winklebury Obelisk -	26 3 0	
Wingreen - - -	45 26 18	75778	Wingreen - - -	37 29 0	19605
Bulbarrow - - -	73 36 13	56280	Trinity Steeple - - -	60 39 0	13687
Trenchard's Tower - -	60 57 29		Ticklepath Hill - -	81 52 0	
Wingreen - - -	64 31 0	57412			
Trinity Steeple - - -	92 41 30	51886			
Bellchalwell Telegraph	22 47 30				

Names of Stations and inter- sected Objects.	Angles for Calculation	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Wingreen - - -	110 55 0	21048	Barrow, seven mile Stone	79 47 0	9671
Trinity Steeple - -	33 26 0	35684	Ticklepath Hill	22 50 0	24526
Barrow near the seven mile stone on the Salisbury Road - - -	35 39 0		Firs, Castle Ditches	77 23 0	
Ticklepath Hill -	56 1 0	24319	Wingreen -	11 54 0	68230
Wingreen - -	73 24 0	21043	Bellchalwell Telegraph	123 35 0	16888
Barrow, seven mile Stone	50 35 0		Houghton Down Clump	44 31 0	
Wingreen - -	15 30 0	28477	Wingreen - -	44 38 0	37316
Barrow, seven mile Stone	130 2 0	9939	Bellchalwell Telegraph	40 21 0	40492
Castle Ditches -	34 28 0		Blandford Telegraph	95 1 0	
Wingreen - -	35 14 0	15563	Wingreen - -	33 49 0	67875
Barrow, seven mile Stone	47 8 0	12250	Bellchalwell Telegraph	88 27 0	37789
Manwood Clump -	97 38 0		Clump of trees beyond Blandford - -	57 44 0	
Wingreen - -	16 8 0	15612	Trinity Steeple -	97 40 0	21614
Barrow seven mile Stone	35 39 0	7444	Bullbarrow - -	17 57 0	69506
Windmill Hill -	128 13 0		Gillingham Spire -	64 23 0	
Wingreen - -	95 14 0	57412	Trinity Steeple -	13 28 0	38144
Bradley Knoll -	36 29 0	96157	Bullbarrow - -	18 46 0	27612
Bellchalwell Telegraph	48 17 0		Sturminster Steeple -	147 46 0	
Wingreen - -	8 20 0	11132	Ticklepath Hill -	40 55 0	16998
Bradley Knoll -	61 26 0	67464	Wingreen - -	58 44 0	13025
Stour Head Obelisk -	110 14 0		White Sheet Barrow	80 21 0	
Wingreen - -	18 13 0	65737	Melbury Hill -	21 54 0	33762
Bradley Knoll -	64 53 0	22696	Bull Barrow - -	27 8 0	27612
Pen Selwood Steeple -	96 54 0		Sturminster Steeple -	130 58 0	
Wingreen - -	11 51 0	75712	Bullbarrow - -	15 19 0	33497
Bradley Knoll -	97 25 0	15679	Sturminster Steeple	117 57 0	10017
Alfred's Tower -	70 44 0		Manston Steeple -	46 44 0	
Wingreen - -	35 36 0	33972	Horton Gazebo -	92 26 0	24811
Bradley Knoll -	23 59 0	48653	Wingreen - -	23 2 0	63354
Font-hill Abbey -	120 25 0		Pistle Down Telegraph	64 32 0	
Wingreen - -	16 10 0	14195	Horton Gazebo -	135 15 20	4230
Melbury Hill -	47 21 0	5373	Pistle Down Telegraph	6 6 40	27974
Direction Post, Blandford Road - -	116 29 0		Chalbury Telegraph -	38 38 0	
Wingreen - -	126 27 0	13000	Horton Gazebo -	50 21 0	34140
Melbury Hill -	22 42 0	27097	Pistle Down Telegraph	83 26 0	26460
White Sheet Barrow -	51 0		Pentridge Hill -	46 13 0	
			Pentridge Hill -	20 21 0	13607
			Pistle Down Telegraph	19 3 0	14497
			Cranborne Steeple -	140 36 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected objects.	Angles for Calculation	Distance in Feet.
Pentridge Hill -	125 44 "	23969	Wingreen - -	46 25 "	33969
Pistle Down Telegraph	25 41 "	44895	Kingsetties - -	86 8 "	24661
White Farm House on high ground -	28 35 "		Font-Hill Abbey -	47 27 "	
Pentridge Hill - -	53 57 "	9638	Wingreen - -	52 38 "	20656
Pistle Down Telegraph	20 33 "	22201	Kingsetties - -	52 37 "	20661
Direction Post near Bottle Clump - -	105 30 "		Wardour Castle -	74 45 "	
Pentridge Hill - -	99 14 "	27363	Wingreen - -	36 55 "	26665
Pistle Down Telegraph	41 12 "	41002	Kingsetties - -	76 47 "	16452
Inn, new Buildings Bland ford Road - -	39 34 "		Pit House - -	66 18 "	
Pistle Down Telegraph	75 22 "	62782	Trinity Steeple -	38 10 "	8626
Wingreen - -	51 59 "	77111	Ticklepath Hill -	37 40 "	8723
Salisbury Spire - -	52 39 "		Kingsetties - -	104 10 "	
Pistle Down Telegraph	58 26 "	27920	Kingsetties - -	70 45 "	8958
Wingreen - -	26 1 "	54234	Ticklepath Hill -	55 42 "	10238
Chalbury Telegraph -	95 33 "		Sedgehill House -	53 33 "	
Pistle Down Telegraph	18 52 "	26154	Kingsetties - -	24 41 "	9526
Wingreen - -	12 35 "	39265	Ticklepath Hill -	89 2 "	3979
Pentridge Hill - -	148 33 "		Semley Steeple -	66 17 "	
Wingreen - -	21 17 "	50690	Duncliffe - -	48 50 "	34213
Pentridge Hill - -	113 25 "	20051	Bullbarrow - -	36 1 "	43800
Summer House on the Wimborne Road from Cranborne - -	45 18 "		Stalbridge House -	95 9 "	
Wingreen - -	32 32 "	29443	Duncliffe - -	33 5 "	19382
Pentridge Hill - -	47 38 "	21431	Bullbarrow - -	14 14 "	43029
Caishmoor Windmill -	99 50 "		Marnhull Steeple -	132 41 "	
Wingreen - -	12 37 "	48851	Trinity Steeple -	28 14 "	34708
Pentridge Hill - -	128 14 "	13584	Gillingham - -	118 38 "	18706
Cranborne Steeple -	39 9 "		Mere Steeple - -	33 8 "	
Pentridge Hill - -	79 38 "	14397	Trinity Steeple -	22 32 "	33323
Direction Post, Bottle Hill	63 33 "	15818	Mere Steeple - -	72 54 "	13361
Handley Steeple -	36 49 "		Silton Steeple - -	84 34 "	
Wingreen - -	23 40 "	37993	Sturminster Steeple -	42 21 "	7045
Kingsetties - -	122 30 "	18084	Trinity Steeple -	8 12 "	33278
East Knoyle Windmill	33 50 "		Hinton Steeple -	129 27 "	
Wingreen - -	25 38 "	35635	Hinton Steeple -	53 53 "	27255
Kingsetties - -	114 34 "	16951	Trinity Steeple -	51 59 "	27947
East Knoyle Steeple -	39 48 "		Iwerne, Minster Steeple	74 8 "	
			Hinton Steeple -	93 21 "	19643
			Trinity Steeple -	29 40 "	39618
			Shillingstone - -	56 59 "	



Names of Stations and inter- sected Objects.	Angles for Calculation	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation	Distances in Feet.
Hinton Steeple - -	16 10	19380	White Sheet Barrow - -	52 40	36516
Shillinstone - -	79 12	5493	Ridge Hill - -	81 18 0	29373
Child Okford - -	84 38		Compton Hut Clump - -	46 2 0	
Wingreen - -	21 26 3	54248	Ridge Hill - -	136 28	4094
Badbury Rings - -	66 2 4	21700	White Sheet Barrow - -	5 27 0	29690
Chalbury Telegraph -	92 30 4		Chilmark Spire - -	38 5 0	
Badbury Rings - -	9 55 3	25048	Wingreen - -	38 12	47339
Chalbury Telegraph -	124 32 3	5241	Ridge Hill - -	85 54	29350
Hauton New Inn - -	45 32		Compton Hut Clump - -	55 54	
Badbury Rings - -	70 56	17720	Font-hill Abbey - -	3 15 0	48381
Chalbury Telegraph -	46 28	23101	Compton Hut Clump - -	157 43 0	7233
Wimborne Steeple - -	62 36		Clump east - -	19 2 0	
Hauton New Inn - -	55 5	11526	Compton Hut Clump - -	48 2 30	8088
Chalbury Telegraph -	98 10	9547	Clump east - -	73 7 0	6285
Wichampton Steeple -	26 45		Barford St. Martin Steeple	58 50 30	
Hauton Gazebo - -	135 15 2	4230	Compton Hut Clump - -	127 25 0	12274
Pistle Down Telegraph -	6 6 40	27974	Clump east - -	33 34 0	17632
Chalbury Telegraph -	38 38		Baverstock - -	19 1 0	
Wingreen - -	45 38	37312	Compton Hut Clump - -	10 17 0	16286
Hamilton Hill - -	67 49	28805	Clump east - -	161 42 0	9259
Blandford Telegraph -	66 33		Wilton Steeple - -	8 1 0	
Blandford Telegraph -	43 42	4855	Nine Barrow Down - -	24 8 36	65052
Bellchalwell Telegraph -	5 11	37132	Ringwood - -	38 51 15	42415
Twiss Barrow - -	31 7		Christ Church - -	117 0 9	
Twiss Barrow - -	24 46	6829	Christ Church - -	91 20 10	50242
Blandford Telegraph -	32 40 0	10394	Ringwood - -	49 2 59	66503
Busbury Barrow - -	22 34 0		Poole Steeple - -	39 36 51	
Twiss Barrow - -	69 9	10865	Nine Barrow Down - -	47 44 54	29399
Busbury Barrow - -	73 44 0	10576	Christ Church - -	25 39 58	50242
Blandford Steeple - -	37 7		Poole Steeple - -	06 35 8	
Blandford Steeple - -	69 28 0	8119	Nine Barrow Down - -	48 33 16	83428
Busbury Barrow - -	44 32 0	10841	Christ Church - -	31 4 0	63303
Station above Charleton -	6 0 0		Hauton Gazebo - -	50 22 44	
Blandford Steeple - -	36 36	8106	Nine Barrow Down - -	25 50 30	23101
Twiss Barrow - -	20 31	15299	Christ Church - -	12 49 0	45392
Station near Charleton -	42 53		Brownsea Castle - -	41 20 30	
White Sheet Barrow - -	31 51	26588	Nine Barrow Down - -	21 54 20	23101
Font-hill Abbey - -	85 32	14073	Poole Steeple - -	47 15 12	11736
Ridge Hill Clump - -	62 37 0		Brownsea Castle - -	10 50 28	

# Trigonometrical Survey.

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Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet	Names of Stations and inter- sected Objects.	Angles for Calculation	Distances in Feet
Christ-Church -	14 14 32	37604	Poole Steeple -	59 47 0	11857
Brownsea Castle -	45 58 2	12868	Constitution Hill -	68 58 0	10982
Poole Heath east Station	119 47 26		Lilliput House -	51 15 0	
Poole Steeple -	63 28 0	12682	Poole Steeple -	65 13 0	15679
Brownsea Castle -	61 51 0	12868	Constitution Hill -	76 48 0	14621
Poole Heath east Station	54 41 0		Lilliput Lookout -	37 59 0	
Brownsea Castle -	107 49 2	11737	Constitution Hill -	112 37 0	19518
Christ-Church -	12 51 2	50242	Brownsea Castle -	37 39 0	29496
Poole Steeple -	59 19 56		Lytchet Beacon -	29 44 0	
Black Down -	8 7 40	102511	Poole Heath -	93 22 0	25787
Nine Barrow Down -	29 48 20	29158	Brownsea Castle -	60 48 30	29488
Wareham Steeple -	142 4 0		Lytchet Beacon -	25 49 30	
Christ-Church -	41 58 0	25111	Poole Steeple -	31 41 30	17088
Hauton Gazebo -	20 37 0	47688	Constitution Hill -	117 16 30	10100
Maesbarrow -	117 25 0		Station on the Wimborne road from Poole -	31 2 0	
Christ Church -	18 22 0	13837	Lytchet Beacon -	30 55 0	15587
Maesbarrow -	20 0 0	12748	Constitution Hill -	52 30 0	10095
House near Decoy Ponds	141 38 0		Station on the Wimb. road	96 35 0	
Maesbarrow -	5 53 0	28892	Wareham Steeple -	64 59 0	29960
Hauton Gazebo -	8 53 0	19178	Woolbarrow -	73 57 0	28250
Cannon Hill -	165 14 0		Lytchet Beacon -	41 4 0	
Poole Heath -	90 3 0	30130	Wareham Steeple -	37 34 0	41942
Christ Church -	38 41 0	48206	Lytchet Beacon -	97 20 0	25787
Old Harry -	51 16 0		Poole Heath -	45 6 0	
Poole Heath -	97 32 0	32481	Wareham Steeple -	42 39 0	14328
Christ-Church -	37 34 0	52813	Poole Heath -	17 10 30	32876
Studland Signal Staff	44 54 0		Black hill near Wareham	120 10 30	
Wareham Steeple -	58 3 0	20480	Lytchet Beacon -	26 20 30	40288
Black Down -	10 44 0	93306	Wareham Steeple -	110 54 0	19581
Woolbarrow Station -	111 13 0		Corfe Castle -	42 45 30	
Poole Steeple -	30 13 0	9919	Poole Heath -	27 21 0	40910
Poole Heath -	50 28 0	6467	Wareham Steeple -	73 22 30	19615
Constitution Hill -	99 19 0		Corfe Castle -	79 16 30	
Poole Steeple -	96 1 30	8221	Wareham Steeple -	43 42 0	14948
Poole Heath -	31 7 0	15820	Lytchet Beacon -	28 20 0	21759
Brownsea Clump -	52 51 30		Arne Clump -	107 58 0	
Poole Heath -	103 16 0	8462	Woolbarrow -	133 58 30	17603
Brownsea Castle -	23 10 0	15848	Wareham Steeple -	21 10 30	35070
Constitution Hill -	51 34 0		Black hill near Wareham	24 51 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Black Hill - - -	96 35 0	41431	Woolbarrow - - -	104 20 3	16970
Poole Heath - - -	47 34 0	55764	Wareham Steeple - -	33 40	29657
Swyre Barrow - - -	35 51		Gallows Hill - - -	41 59 3	
Wingreen - - -	10 38 14	125534	Nine Barrow Down - -	27 44	65661
Nine Barrow Down	73 32 14	24163	Bullbarrow - - -	32 25 4	56979
Creech Beacon - - -	95 49 32		Frampton Obelisk - -	119 50 1	
Wingreen - - -	27 4 38	57250	Wareham Steeple - -	18 53	39070
Nine Barrow Down	18 12	83422	Gallows Hill - - -	120 2	14606
Hauton Observatory	134 43 13		Frampton Obelisk - -	41 5	
Ringwood - - -	58 44 0	7946	Woolbarrow - - -	71 12	9330
Christ Church - - -	10 3 30	38888	Gallows Hill - - -	32 19	16522
David's Hut - - -	111 12 30		Barrow South - - -	76 29	
Ringwood - - -	48 50	32690	Woolbarrow - - -	48 24	8283
Christ Church - - -	53 33	34930	Black Hill - - -	27 6	13597
Hembury Summer House	77 37 0		Bloxworth Steeple - -	04 30	
Christ Church - - -	38 59 0	38909	Frampton Obelisk - -	27 3 5	7117
Hembury Summer House	79 10 0	24922	Gallows Hill - - -	16 43 4	19730
David's Hut - - -	61 51 0		Black Knoll - - -	36 12 30	
Ringwood - - -	7 3 30	24435	Frampton Obelisk - -	65 53	15022
Hembury Summer House	19 35 0	8958	Black Knoll - - -	85 55	13746
Gibbet on Parley Common	53 21 30		Wool Steeple - - -	28 12	
David's Hut - - -	11 6	16881	Gallows Hill - - -	8 42	25343
Hembury Summer House	21 15	8967	Black Knoll - - -	44 14 0	6558
Gibbet on Parley Common	47 39		Winfrith Newburgh Steep.	27 4	
David's Hut - - -	8 38 0	22298	Wareham Steeple - -	40 54 0	48851
Hembury Summer House	49 19 0	4413	Gallows Hill - - -	02 48	32799
Barrow near Hembury	22 3 0		High Chaldon - - -	36 18	
David's Hut - - -	17 0 0	28853	Wareham Steeple - -	73 24	35093
Barrow near Hembury	122 7 0	9960	Gallows Hill - - -	52 31	29058
Cannon Hill - - -	40 53 0		Rampart, Swyre Barrow	54 5	
Woolbarrow - - -	59 9 0	28829	Wareham Steeple - -	60 14 30	28748
Black Hill - - -	83 30 0	24910	Gallows Hill - - -	58 20 30	29319
Musson Down - - -	37 21 0		Lulworth Castle - -	61 25 0	
Black Hill - - -	36 54 0	33316	Wool Steeple - - -	24 17	24137
Musson Down - - -	94 57 0	20078	Black Knoll - - -	29 45	12911
Houghton Clump - -	48 9 0		High Chaldon - - -	25 58 0	
Woolbarrow - - -	48 13	30784	High Chaldon - - -	81 28 30	23947
Musson Down - - -	70 5	24415	Black Knoll - - -	68 26 0	25465
Milborne Obelisk - -	61 42		Knighton House - -	30 5 30	

Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.
High Chaldon - - -	138 21 30	6080	Black Down - - -	44 19 0	52181
Black Knoll - - -	13 2 0	17916	Ridgeway Hill - - -	111 52 0	39281
Barrow near W. Lulworth Flagstaff - - -	28 36 30		East Signal Staff, Portland - - -	23 49 0	
High Chaldon - - -	34 9 30	29758	Black Down - - -	49 6 30	56851
Black Knoll - - -	125 2 0	20406	Ridgeway Hill - - -	108 39 30	45361
Barrow near Aff-Piddle - - -	20 48 30		Portland Spire - - -	22 14 0	
High Chaldon - - -	46 9 30	23549	Black Down - - -	54 57 0	64130
Black Knoll - - -	101 19 30	17323	Ridgeway Hill - - -	105 3 30	54367
Direction Post Knighton Down - - -	32 31 0		Portland Lighthouse - - -	19 59 30	
Nine Barrow Down - - -	15 28 23	109854	Dorchester Steeple - - -	54 51 0	42655
Black Down - - -	54 29 40	36002	Ridgeway Hill - - -	102 9 20	35077
Wyke Regis Steeple - - -	110 1 57		Lulworth Flagstaff - - -	22 59 40	
Nine Barrow Down - - -	7 54 33	103647	Black Down - - -	36 47 30	45618
Black Down - - -	30 35 42	28022	Dorchester Steeple - - -	107 18 0	28615
Dorchester Steeple - - -	141 29 45		Foxwell Flagstaff - - -	35 54 30	
Dorchester Steeple - - -	54 5 30	17048	Dorchester Steeple - - -	67 21 0	14739
Black Down - - -	37 27 0	22705	Foxwell Flagstaff - - -	30 40 0	26669
Ridgeway Station - - -	88 27 30		Fire Beacon on Piddle Town Heath - - -	81 59 0	
Black Down - - -	51 3 30	14867	Black Down - - -	6 42 30	51679
Wyke Regis Steeple - - -	23 27 0	29057	Foxwell Flagstaff - - -	103 23 30	8307
Ashton Ridge - - -	105 29 30		Ower Moigne Steeple - - -	39 54 0	
Wyke Regis Steeple - - -	15 30 0	26609	Piddle Town Heath - - -	12 23 0	14452
Ashton Ridge - - -	64 59 0	7873	Foxwell Flagstaff - - -	13 52 0	12931
Ridgeway Hill - - -	99 31 0		Broad-Moyne - - -	153 45 0	
Wyke Regis Steeple - - -	62 24 0	39090	Dorchester Steeple - - -	35 10 0	8299
Ridgeway Hill - - -	76 4 30	35690	Piddle Town Heath - - -	31 0 0	9280
Lulworth Flagstaff - - -	41 31 30		West Stafford Steeple - - -	113 50 0	
Wyke Regis Steeple - - -	39 15 0	27583	Dorchester Steeple - - -	39 48 0	38386
Ashton Ridge - - -	66 12 0	19074	Foxwell Flagstaff - - -	92 2 30	24587
Osmington Down - - -	74 33 0		Frampton Obelisk - - -	48 9 30	
Osmington Down - - -	56 25 0	7487	Black Down - - -	44 20 30	30983
Wyke Regis Steeple - - -	14 54 0	24257	Dorchester Steeple - - -	74 51 0	22435
Bincum Down Barrow - - -	108 41 0		Godmansrone Down - - -	60 45 30	
Osmington Down - - -	72 11 0	5197	Black Down - - -	69 0 0	29941
Bincum Down Barrow - - -	42 42 0	7857	Godmanstone Down - - -	54 4 30	34518
Preston Steeple - - -	65 7 0		Aggerdon Hill - - -	56 55 30	
Ashton Ridge - - -	17 8 0	27622	Black Down - - -	17 17 0	20673
Wyke Regis Steeple - - -	91 56 0	8561	Aggerdon Hill - - -	31 3 0	11908
Barrow near Weymouth - - -	90 56 0		Compton Barrow - - -	131 40 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Compton Barrow -	56 29 0	21200	Puncknoll -	34 47 30	15918
Black Down -	63 6 0	19819	Aggerdon Hill -	48 40 30	12094
Sea Barrow Clump -	60 25 0		Long Bredy -	96 32 0	
Compton Barrow -	19 30 0	35205	Long Bredy -	32 37 0	6354
Sea Barrow Clump -	135 34 0	16787	Puncknoll -	17 57 30	11108
Station on the right of the road from Sherborne to Dorchester -	24 56 0		Cheney Litton Steeple -	129 25 30	
Station right of road -	56 27 20	16368	Puncknoll -	25 30 0	36777
Sea Barrow Clump -	60 25 30	15686	Shipton Beacon -	135 36 0	22630
Dorchester Steeple -	63 7 10		Symondsburly Hill -	18 54 0	
Compton Barrow -	30 3 0	24390	Puncknoll -	70 40 0	36786
Sea Barrow Clump -	89 34 30	12213	Aggerdon Hill -	75 39 0	35830
Godmanstone Down Barrow -	60 22 30		Symondsburly Hill -	33 41 0	
Compton Barrow -	49 27 0	17206	Puncknoll -	69 30 0	35372
Sea Barrow Clump -	52 32 0	16472	Aggerdon Hill -	75 20 0	34248
Frampton Barrow -	78 1 0		Symondsburly Steeple -	35 10 0	
Godmanstone Down -	42 9 0	12190	Puncknoll -	37 36 30	5804
Dorchester Steeple -	31 24 30	15697	Shipton Beacon -	15 54 30	12924
Sea Barrow Clump -	106 26 30		Swyre Barrow -	120 29 0	
Aggerdon Hill -	39 52 0	12095	Shipton Beacon -	78 52 0	10130
Compton Barrow -	71 18 0	8183	Swyre Barrow -	42 11 0	14802
Long Bredy -	68 50 0		North Hill -	58 57 0	
Frampton Barrow -	47 32 30	9962	Shipton Beacon -	38 42 0	13769
Sea Barrow Clump -	37 2 0	12204	North Hill -	93 58 0	8651
Godmanstone Down -	95 25 30		Bridport Market-house	47 13 0	
Frampton Barrow -	15 52 30	6155	Swyre Barrow -	22 0 0	8008
Sea Barrow Clump -	9 4 0	10682	North Hill -	22 8 0	7962
Frampton Steeple -	155 3 30		Green Cliff -	135 52 0	
Frampton Barrow -	68 45 30	11909	Shipton Beacon -	16 5 0	10186
Godmanstone Down -	63 2 0	12457	Swyre Barrow -	41 59 0	4218
Clump of trees North -	48 12 30		Berwick Farm -	121 56 0	
Black Down -	59 13 0	2556	Shipton Beacon -	40 48 30	10151
Aggerdon Hill -	37 4 0	25870	Symondsburly Hill -	23 56 0	16352
Abbotsbury Flagstaff -	83 43 0		North Hill -	115 15 30	
Abbotsbury Flagstaff -	93 49 0	26013	North Hill -	52 19 0	5127
Aggerdon Hill -	73 35 0	15093	Symondsburly Hill -	17 4 0	13827
Shipton Beacon -	72 36 0		Lookout House, Bridport Harbour -	110 37 0	
Shipton Beacon -	8 42 0	17027	Shipton Beacon -	8 27 0	3739
Aggerdon Hill -	53 8 0	21059	North Hill -	4 53 0	6455
Puncknoll -	45 10 0		Shipton Steeple -	166 40 0	

Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.
North Hill - -	29 35 0	3806	Symondsbury Hill -	7 13 0	19313
Symondsbury Hill -	8 12 0	13177	Pegnorth - -	9 7 0	18847
Bothenhampton Steeple	142 13 0		Round Hill, near Milton	163 40 0	
Puncknoll - -	83 55 0	44945	Symondsbury Hill -	64 0 0	24790
Aggerdon Hill -	69 58 0	47569	Pegnorth - -	43 35 0	32318
Golden Cape Signal Staff	26 7 0		Lewson Hill - -	72 25 0	
Symondsbury Hill -	64 3 0	23550	Symondsbury Hill -	40 52 0	24767
Shipton Beacon -	59 48 0	24501	Warren Hill - -	73 26 0	16906
Warren Hill - -	56 9 0		Lewson Hill - -	65 42 0	
Symondsbury Hill -	40 52 0	34277	Symondsbury Hill -	20 30 0	33201
Shipton Beacon -	98 21 0	22668	Warren Hill - -	122 59 30	13863
Pegnorth - -	40 47 0		Oak Tree North of Warren Hill	36 30 30	

ART. VII. *Secondary Triangles for the Survey of Hampshire, Part of Somersetshire, and Part of Wiltshire. Plate VII.*

The Distances serving as Base Lines for the following Triangles are

Beacon Hill -	58086 Feet.
Dean Hill to { Ringwood Steeple	74367
Farley Monument	53239
Southampton Spire	74522
Putsey Hill -	156122
Highclere Beacon	125805
Butsey Hill to { Portdown Hill -	52729
Wingreen to { Ringwood Steeple	87983
Beacon Hill to { Highclere Beacon	98694
Bradley Knoll -	135272
Mendips Hill to { Bradley Knoll -	61963
Dundry Beacon	69196

Dean Hill - -	42 53 0	60270	Dean Hill	23 17 30	53233
Ringwood Steeple -	53 37 30	50936	Stockbridge Hill	75 29 50	21747
Lyndhurst Steeple -	83 29 10		Farley Monument	81 12 40	
Dean Hill - -	71 6 40	54340	Dean Hill	15 2 0	14981
Beacon Hill - -	51 46 30	65445	Stockbridge Hill -	5 34 0	40059
New Station on Stockbridge Hill -	57 6 50		Cadbury Beech	139 24 0	
Dean Hill - -	53 21 30	35462	Dean Hill -	84 44 30	60275
Beacon Hill - -	32 37 10	46614	Farley Monument	51 31 0	76677
Salisbury Spire -	2 20 0		Lyndhurst Steeple	43 44 30	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet	Names of Stations and inter- sected Objects.	Angles for Calculation	Distances in Feet.
Dean Hill - -	45 12 20	33950	Ayre's Summer House	109 3 0	24745
Farley Monument -	39 24 40	37948	Gallows Hill - -	33 10 0	42754
Heathcote's Pillar -	95 23 0		Pustle Lodge - -	37 47 0	
Dean Hill - -	70 47 0	41880	Ayre's Summer House	28 35 0	19683
Farley Monument -	45 4 0	55862	Gallows Hill - -	42 5 0	14051
Caddenham Station -	64 9 0		Clebury Rings - -	109 20 0	
Dean Hill - -	59 25 20	83562	Heathcote's Pillar	24 44	16303
Farley Monument -	102 2 0	54256	Caddenham Station	61 38	7752
Town Hill Telegraph	38 32 49		Half Moon Clump	93 38	
Dean Hill - -	42 29 20	88921	Heathcote's Pillar -	91 18	30024
Farley Monument -	01 36 10	61314	Caddenham Station -	57 26	35616
Nettle Heath Clump -	35 54 30		White Parish Steeple	31 16	
Wingreen - -	8 42 48	87461	Heathcote's Pillar .	79 24	19519
Ringwood Steeple -	83 24 25	13338	Caddenham Station	52 10	44292
Moyls Court Summer House - -	87 52 47		Rownham's Summer House	48 26	
Ringwood Steeple, -	52 39 30	15531	Heathcote's Pillar -	90 43	41755
Moyls Court, - -	72 24 0	12954	Caddenham Station -	65 31	45877
Picket Post Inn - -	54 56 30		Ayre's Summer House	23 46	
Dean Hill - -	25 36	41874	Heathcote's Pillar -	95 8	17483
Heathcote's Pillar -	01 54	18490	Caddenham Station -	40 58	26559
Caddenham Station -	52 30		Toot Hill Telegraph -	43 54	
Dean Hill - -	30 56	10703	Gallows Hill - -	56 5	13734
Heathcote's Pillar -	11 10	41753	Clebury Rings - -	60 44	13065
Ayre's Summer House	37 54		Downton Steeple -	63 11	
Dean Hill - -	28 10	32895	Farley Monument -	12 6	37949
Heathcote's Pillar -	72 19	16298	Lyndhurst Steeple -	11 22	40362
Half Moon Clump -	79 31		Heathcote's Pillar -	156 32 0	
Dean Hill - -	5 46	50928	Farley Monument -	50 6	61313
Heathcote's Pillar -	62 59	17485	Lyndhurst Steeple -	51 33	60061
Toot Hill Telegraph,	11 15		Nettle Heath Clump, -	78 21	
Heathcote's Pillar -	40 15	35268	Farley Monument -	48 39	5589
Ayre's Summer House -	56 56	27191	Heathcote's Pillar -	8	32701
Branshaw Telegraph -	82 49		Farley Spire - -	158 13 0	
Branshaw Telegraph -	156 28 0	8255	Farley Monument -	105 44	44548
Ayre's Summer House	5 25 0	34915	Heathcote's Pillar	40 36	65889
Mr. Harben's House	18 7 0		White Flood Clump	33 40 0	
Branshaw Telegraph -	56 54	30561	Heathcote's Pillar	13 2 0	34176
Ayre's Summer House	67 49 0	27712	Lyndhurst Steeple -	47 29 0	10457
Gallows Hill (Maze Hill),	55 17 0		Minstead Steeple	119 29 0	

Names of Stations and inter- sected Objects.	Angles for Calculation	Distances in Feet.	Names of Stations and inter- sected Objects	Angles for Calculation	Distances in Feet.
Heathcote's Pillar -	23 32 0	34270	Eling Steeple -	114 19	7651
Lyndhurst Steeple -	56 50 0	16346	Romsey Steeple -	12 3	33399
Stoney Cross Inn -	99 38 0		Hunter's Inn -	53 38	
Heathcote's Pillar -	88 57 0	17483	Eling Steeple -	113 50	13450
Lyndhurst Steeple -	23 35 0	43691	Hunter's Inn -	43 14	17961
Toot Hill Telegraph -	67 28 0		Upton Steeple -	22 56	
Dean Hill -	51 15 20	53233	Farley Monument -	43 8	44566
Southampton Spire -	45 13 0	58496	Town Hill Telegraph -	54 30	37426
Farley Monument -	83 31 40		White Flood Clump -	82 22	
Dean Hill -	76 21 1	74367	Farley Monument -	57 5	40220
Southampton Spire -	51 44 5	92027	White Flood Clump -	55 41	41211
Ringwood Steeple -	51 53 5		Stoneham Summer House -	66 20	
Dean Hill -	0 10 4	74762	Farley Monument -	13 3	26956
Southampton Spire -	135 40 1	334	White Flood Clump -	18 24	19283
East Spire, <i>Southampton</i> -	44 9 1		Ann's Hill Fire Beacon -	148 33	
Farley Monument -	32 1 1	76668	Farley Monument -	3 40	41076
Southampton Spire -	99 6 1	41165	White Flood Clump -	36 23	4428
Lyndhurst Steeple -	48 53 1		Owstlebury Steeple -	139 57 1	
Dean Hill -	7 47 1	59523	Farley Monument -	16 20 5	45975
East Spire, <i>Southampton</i> -	27 3 1	17726	White Flood Clump -	88 2 5	12948
Eling Steeple -	145 10 0		Gander Down Sum. House -	73 36 1	
Dean Hill -	19 45 30	74761	Stoneham Summer House -	75 19	24472
Caddenham Station -	138 25	38078	White Flood Clump -	34 4	42264
East Spire, <i>Southampton</i> -	21 49 30		Nettle Heath Clump -	70 37	
Dean Hill -	34	88910	Stoneham Summer House -	27 19	40469
East Spire, <i>Southampton</i> -	134 46	18678	White Flood Clump -	74 12	19301
Nettle Heath -	36 39 20		Ann's Hill Fire Beacon -	78 29	
Dean Hill -	13 46 0	33947	White Flood Clump -	7 27	42254
Eling Steeple -	16 20	27753	Town Hill Telegraph -	29 13	7071
Heathcote's Pillar -	49 40		Nettle Heath Clump -	43 20	
Heathcote's Pillar -	41 1 40	40415	White Flood Clump -	82 50 30	25844
Eling Steeple -	95 53 10	26670	Town Hill Telegraph -	36 51 30	42751
Lyndhurst Steeple -	43 5 10		Yew Tree, <i>Liquant Farm</i> -	60 18 0	
Heathcote's Pillar -	95 15	7813	White Flood Clump -	25 20	57788
Eling Steeple -	15 17 10	29513	Nettle Heath Clump -	11 58 0	26662
Romsey Steeple -	69 27 50		St. Margaret's Farm -	42 42 0	
Heathcote's Pillar -	47 18	7816	White Flood Clump -	50 40	4862
Toot Hill Telegraph -	55 14 30	13472	Nettle Heath Clump -	36 0	3913
Romsey Steeple -	107 27 30		Beacon Hill, near Exton -	49 33 20	



Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.
White Flood Clump -	108 16 0	19269	Farley Monument -	21 51 30	82827
Nettle Heath Clump -	20 45 0	51659	Wickham Lodge Telegraph	76 48 0	31674
Ann's Hill Fire Beacon -	50 59 0		Old Winchester Hill -	81 20 30	
White Flood Clump -	97 42 20	38513	Old Winchester Hill -	19 28 0	31033
Nettle Heath Clump -	38 49 40	60871	Wickham Lodge Telegraph	76 53 0	10621
Old Winchester Hill -	43 28 0		Shirley Heath Windmill	83 39 0	
Ann's Hill Fire Beacon -	18 43 0	57402	Old Winchester Hill -	87 25 0	28950
Nettle Heath Clump -	93 24 0	18619	Wickham Lodge Telegraph	43 36 0	41937
East Spire, Southampton	62 53 0		Chalkdon Telegraph -	48 59 0	
Ann's Hill Fire Beacon -	49 36 0	12511	Old Winchester Hill -	22 39 0	39995
White Flood Clump -	40 27 0	14686	Wickham Lodge Telegraph	108 46 30	16268
Barrow above Longwood Bottom	89 57 0		Southwick Park House -	48 34 30	
Ann's Hill Fire Beacon -	59 41 30	24934	Old Winchester Hill	13 15 0	37978
White Flood Clump -	72 43 30	22545	Wickham Lodge Telegraph	121 18 0	10137
Stoke Hill Station -	47 36 0		Fir Tree near Wickham	45 27 0	
White Flood Clump -	78 16 0	12950	Old Winchester Hill -	88 10 30	13971
Beacon Hill -	29 42 0	25591	Wickham Lodge Telegraph	24 5 30	34209
Gander Down Summer House	72 2 0		Beacon Hill near Exton	67 44 0	
Ann's Hill Fire Beacon -	86 54 0	5422	Old Winchester Hill -	38 20 30	47263
Barrow, Longwood Bottom	23 54 0	13364	Wickham Lodge Telegraph	100 25 30	29811
Winchester Cathedral -	69 12 0		Portsdown Hill Telegraph	41 14 0	
White Flood Clump -	142 14 0	12925	Beacon Hill -	43 20 30	34756
Stoke Hill Station -	13 35 0	33705	Old Winchester Hill -	115 21 30	26298
Gander Down Summer House	24 11 0		Froxfield Steeple -	21 18 0	
White Flood Clump -	25 31 0	25294	Beacon Hill -	26 9 30	5734
Stoke Hill Station	91 29 0	10900	Old Winchester Hill -	15 59 0	9179
Obelisk on Cranbury Common	63 0 0		Exton Steeple -	137 51 30	
Farley Monument -	25 6 30	84105	Beacon Hill -	42 10 30	7898
Nettle Heath Clump -	112 35 0	38652	Old Winchester Hill -	33 9 0	9697
Wickham Lodge Telegraph	42 18 30		Meon Stone -	104 40 30	
Farley Monument -	40 52 30	98230	Beacon Hill -	87 6 0	14976
Nettle Heath Clump	101 24 0	65577	Old Winchester Hill -	48 32 30	19958
Broadhalfpenny Windmill	37 43 30		Brockwood House -	44 21 30	
Farley Monument -	44 7 0	111405	Beacon Hill -	84 41 30	29052
Nettle Heath Clump	103 32 0	79766	Old Winchester Hill	68 41 30	31051
Chalkdon Telegraph -	32 21 0		Shirley Windmill -	26 37 0	
			Beacon Hill -	83 35 0	36807
			Old Winchester Hill -	74 55 0	37882
			Fir Tree, Wickham Toll-gate	21 30 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Beacon Hill - - -	56 41 30	18678	Farley Monument - - -	15 48 30	111234
Old Winchester Hill - - -	76 37 0	16046	Broadhalfpenny Windmill	106 11 30	31555
Soberton Steeple - - -	46 41 30		Portsdown Windmill - - -	58 0 0	
Beacon Hill - - -	52 58 0	46762	Farley Monument - - -	15 44	84102
Old Winchester Hill - - -	110 49 0	39936	Broadhalfpenny Windmill	52 51	28612
'Thistlewait's House - - -	16 13		Wickham Lodge Telegraph	111 25	
White Flood Clump - - -	28 32	25849	Farley Monument - - -	19 3	111258
Beacon Hill - - -	80 6	12534	Chalkdon Telegraph - - -	80 15	36846
Liquant Yew Tree - - -	71 31 30		Portsdown Windmill - - -	80 42	
Beacon Hill - - -	82 55 0	13976	Beacon Hill - - -	28 44	55016
Liquant Yew Tree - - -	52 4 0	17584	Broadhalfpenny Windmill	123 1	31542
Old Winchester Hill - - -	45 1 0		Portsdown Windmill - - -	28 15	
Beacon Hill - - -	26 6 30	16265	Beacon Hill - - -	26 2 30	56669
Liquant Yew Tree - - -	106 8 30	7451	Broadhalfpenny Windmill	128 36	31834
Hill near Waltham - - -	47 45 0		Portsdown Telegraph - - -	25 21 30	
Liquant Yew Tree - - -	21 44	12173	Wickham Lodge Telegraph	65 58	28611
Hill near Waltham - - -	130 33	5932	Portsdown Telegraph - - -	55 13	31815
Bishops Waltham Steeple	27 43		Broadhalfpenny Windmill	58 49	
Hill near Waltham - - -	97 5 0	6529	Chalkdon Telegraph - - -	37	8256
Bishops Waltham Steeple	43 53 0	9348	Broadhalfpenny Windmill	62 30	9251
Waltham House - - -	39 2 0		Catherington Windmill	110 29	
Beacon Hill - - -	97 21 0	31055	Farley Monument - - -	15 46	73493
Nettle Heath Clump - - -	28 1 0	65569	Broadhalfpenny Windmill	35 59 0	33985
Broadhalfpenny Windmill	54 38 0		Shirley Windmill - - -	128 15 0	
Old Winchester Hill - - -	24 1 30	18179	Broadhalfpenny Windmill	61 34	9253
Chalkdon Telegraph - - -	30 56 30	14394	Portsdown Telegraph - - -	16 32 0	28592
Broadhalfpenny Windmill	125 2 0		Catherington Windmill	101 54 0	
Wickham Lodge Telegraph	26 14 30	60209	Chalkdon Telegraph - - -	62 1	30831
Chalkdon Telegraph - - -	114 23 0	29229	Stanstead Monument - - -	61 32	30972
Stanstead Monument - - -	39 22 30		Beacon Hill Telegraph	56 27	
Wickham Lodge Telegraph	56 47 30	29794	Portsdown Telegraph - - -	22 1	60900
Chalkdon Telegraph - - -	44 13 0	35746	Chalkdon Telegraph - - -	132 13	30826
Portsdown Hill Telegraph	78 59 30		Beacon Hill Telegraph - - -	25 46	
Wickham Lodge Telegraph	48 58 0	31201	Portsdown Telegraph - - -	66 53	27517
Chalkdon Telegraph - - -	47 39 0	31846	Chalkdon Telegraph - - -	45 25	35533
Purbrook Park House	83 23 0		Hensworth Chapel - - -	67 42	
Wickham Lodge Telegraph	60 2 0	27108	Chalkdon Telegraph - - -	134 37 0	28950
Chalkdon Telegraph - - -	70 35 30	36849	Beacon Hill Telegraph - - -	21 56 20	55157
Portsdown Windmill - - -	60 22 30		Old Winchester Hill - - -	23 26 40	

Names of Stations and inter- sected Objects.	Angles for Calculation.		Names of Stations and inter- sected Objects	Angles for Calculation.	Distances in Feet.
Beacon Hill Telegraph	41 59 10	42346	Beacon Hill Telegraph	4 11	59011
Old Winchester Hill	50 6 2	36922	Woolmer Forest Clump	51 44	6136
Froxfield Windmill	87 54 30		Headley Spire	123 35	
Farley Monument	28 47	94247	Beacon Hill Telegraph	13 51 0	49112
Old Winchester Hill	89 43	45380	Woolmer Forest Clump	38 13 0	19004
Newton Windmill	61 30 0		Bramshot Spire	127 56	
Chalkdon Telegraph	86 50 0	35532	Beacon Hill Telegraph	11 16 3	27541
Beacon Hill Telegraph	50 52 0	45736	Woolmer Forest Clump	8 36	36010
Hemsworth Chapel	42 18 0		Clump of Trees near the Flying Bull Inn.	160 7 3	
Beacon Hill Telegraph	44 7 40	63760	Beacon Hill Telegraph	29 46	49115
Old Winchester Hill	78 3 20	45376	East Worldham Steeple	44 29	34799
Newton Windmill	57 49		Bramshot Spire	05 45	
Butser Hill	63 9 4	156119	Beacon Hill Telegraph	20 34	59019
Portsdown Hill Station	97 16 28	140419	East Worldham Steeple	59 31	24059
Dean Hill	19 34 28		Headley Spire	99 55	
Dean Hill	15 50 12	168055	East Worldham Steeple	70 0	24127
Butser Hill	96 54 20	46197	Woolmer Forest Clump	65 25	24932
Havant Steeple	67 15 28		Bentley Steeple	44 39	
Dean Hill	13 16 6	178357	East Worldham Steeple	7 12	11976
Butser Hill	13 7 0	44509	Woolmer Forest Clump	12 33	6907
Bourne Steeple	53 36 54		Cricket Inn, Kingsley	60 15	
Beacon Hill Telegraph	31 30 0	75002	East Worldham Steeple	29 7 0	37346
Froxfield Windmill	18 52 0	44748	Woolmer Forest Clump	27 37 0	22941
Binstead Spire	29 38 0		Large house near Bramshot	23 16	
Beacon Hill Telegraph	40 28 0	62614	East Worldham Steeple	60 51	20209
Froxfield Windmill	97 25 0	40980	Binstead Spire	84 36	17728
Woolmer Forest Clump	42 7 0		Large Beech Tree, Froyle	34 33 0	
Newton Windmill	92 27 30	36890	East Worldham Steeple	57 29	19882
Beacon Hill Telegraph	29 25 30	75019	Binstead Spire	87 11	16785
Binstead Spire	58 7 0		Large Ash Tree, Froyle	35 30	
Beacon Hill Telegraph	7 0 0	67453	East Worldham Steeple	88 2 0	6350
Binstead Spire	45 54 0	11512	Binstead Spire	29 20 0	12955
East Worldham Steeple	27 26 0		Station South of Alton	62 38 0	
Beacon Hill Telegraph	8 54 0	87480	East Worldham Steeple	102 49	11988
Binstead Spire	130 9	17706	Binstead Spire	39 31	18370
Large Beech Tree, Froyle	40 57		Alton Spire	37 40 0	
Beacon Hill Telegraph	15 54	67471	Binstead Spire	1 2 35	16784
Woolmer Forest Clump	97 1	18024	Large Beech Tree	38 30	1215
East Worldham Steeple	67 5		Large Ash Tree	138 55	

Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.
Large Beech Tree -	18 32 0	35706	Beacon Hill - -	76 55 0	19096
Beacon Hill Telegraph	11 57 0	54813	Highclere Beacon -	11 9 0	96187
Selbourne Steeple -	149 31 0		Mallets Grove, Building	91 56 0	
Station South of Alton	147 36 30	6060	Beacon Hill - -	18 44 0	56816
Binstead Spire - -	10 11 0	18362	Highclere Beacon -	22 7 20	48455
Alton Spire - -	22 12 30		Andover Steeple -	139 8 40	
Station South of Alton	74 7 0	14759	Beacon Hill - -	19 37 0	17663
Binstead Spire -	57 52 0	16763	Highclere Beacon -	4 8 0	82270
Large Ash Tree - -	48 1 0		Thrupton Hill, <i>Small Tree</i>	156 15 0	
Gander Down Sum. House	124 28 40	23020	Beacon Hill - -	50 33 0	45256
Farley Monument -	17 49 40	61982	Highclere Beacon -	26 33 0	78183
Alresford Steeple -	37 41 40		Danesbury Camp -	102 54 0	
Gander Down Sum. House	51 20 0	23311	Beacon Hill - -	26 24 20	134300
Alresford Steeple -	65 5 0	20069	Highclere Beacon -	113 2 40	60304
Yew Tree Clump, <i>Hitchin</i>	63 35 0		Windmill Clump, near Dummer	42 33 0	
Gander Down Sum. House	5 7 0	25553	Beacon Hill - -	84 6 0	75782
Alresford Steeple -	136 51 0	3332	Highclere Beacon -	39 40 0	118092
Old Alresford Steeple	38 2 0		Milk Hill, <i>Thorn</i> -	56 14 0	
Gander Down Sum. House	17 25 0	32619	Beacon Hill - -	2 20 0	103990
Alresford Steeple -	129 43 0	12697	Highclere Beacon -	40 54 0	6713
Abbotsdown Barrow -	32 52 0		Buryclere, <i>Small Clump</i>	36 46 0	
Gander Down Sum. House	30 38 0	23434	Beacon Hill - -	29 5 0	31734
Alresford Steeple -	76 33 0	12277	Highclere Beacon -	12 15 50	72618
Stoke Down, <i>Large Barrow</i>	72 49 0		Centre Clump on Windmill Hill near Ludgershall	138 39 10	
Gander Down Sum. House	46 12 0	23325	Beacon Hill - -	26 48 0	108764
Old Alresford Steeple	60 48 0	19285	Highclere Beacon -	88 7 0	49066
Yew Tree Clump -	73 0 0		Popham Beacon -	65 5 0	
Alresford Steeple -	53 9 0	12679	Beacon Hill - -	23 56 0	50821
Stoke Down -	65 16 0	11171	Highclere Beacon -	21 32 10	56163
Abbotsdown Barrow -	61 35 0		Chute Down Ash Tree	134 31 50	
Alresford Steeple -	101 38 0	9675	Beacon Hill - -	24 56 0	57596
Abbotsdown Barrow.	32 55 0	17438	Highclere Beacon -	27 35 20	52427
Ovington Steeple -	45 27 0		Tridcombe Down Ash Tree	127 28 40	
Alresford Steeple -	101 42 0	6152	Highclere Beacon -	21 20 13	212343
Abbotsdown Barrow	19 2 0	16547	Dean Hill - -	133 15 34	100042
Bishop's Sutton Steeple	48 16 0		Wiggreen - -	25 24 13	
Beacon Hill -	72 13 0	81711			
Highclere Beacon -	50 1 30	94336			
Farley Monument -	67 49 30				

Names of Stations and inter- sected Objects.	Angles for Calculation.	Dis- tances in F	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Highclere Beacon -	84 34 50	30295	Beacon Hill - -	74 27 0	50819
Dean Hill - -	13 51 40	125890	Danesbury Camp - -	57 8	58284
Walbury Intrenchment	81 33 30		Ash Tree, <i>Cbute Common</i>	48 25 c	
Highclere Beacon -	107 39 0	30297	Beacon Hill	57 18 0	17651
Farley Monument -	15 35 0	107472	Mallet's Grove	57 14 0	17664
Walbury Intrenchment	56 46 0		Thrupton Hill, <i>Small Tree</i>	65 28	
Highclere Beacon -	68 21 0	32512	Beacon Hill - -	105 51 c	24259
Walbury Intrenchment	58 48 0	35328	Mallet's Grove -	42 13 c	34730
Newbury Steeple -	52 51 0		Tidworth Steeple -	31 56 c	
Highclere Beacon -	62 41 0	29121	Danesbury Camp -	30 56 c	29580
Walbury Intrenchment	70 27 0	36885	Andover Steeple -	72 45 c	15921
Donnington Castle -	46 52 0		Weyhill Steeple -	70 19 c	
Highclere Beacon -	54 15 0	32377	Beacon Hill - -	114 29	34003
Walbury Intrenchment	66 35 0	28035	Mallet's Grove -	43 58	47314
Uphurstborne Windmill	59 10 0		Pollard, near Druid's Head	21 33	
Highclere Beacon -	55 47 0	9257	Beacon Hill - -	103 41	
Walbury Intrenchment	16 58 0	26231	Mallet's Grove -	37 34	29643
Lord Carnarvon's Temple	107 15 0		Tidworth Summer House	38 45	
Highclere Beacon -	51 24 c	34841	Beacon Hill - -	91 23	58110
Walbury Intrenchment	72 33 0	28543	Mallet's Grove -	70 39	61869
Lord Craven's House -	56 3 0		Conholt Lodge -	17 58	
Highclere Beacon -	10 18 0	30925	Beacon Hill - -	60 19 0	12387
Walbury Intrenchment	91 21 c	5531	Mallet's Grove -	39 42 0	16847
West Woodhay Steeple	78 21 0		Parkhouse Inn -	79 59 0	
Beacon Hill - -	31 49 0	56797	Highclere Beacon -	5 40 30	39126
Danesbury Camp -	95 44 0	30094	Newbury Steeple -	148 56 c	7497
Andover Steeple -	52 27 c		Donnington Castle -	25 23 30	
Beacon Hill - -	24 41 0	49400	Walbury Intrenchment	4 47 0	23316
Danesbury Camp - -	89 12 0	20669	Newbury Steeple -	9 8 0	12248
Bury Hill Clump -	66 7 0		Enborne Steeple -	166 5 0	
Beacon Hill - -	79 39 0	31736	Beacon Hill - -	91 21 0	31717
Danesbury Camp	38 17 0	50391	Farley Monument -	21 2	88345
Windmill Hill near Lud- gershall - -	62 4		Windmill Hill, near Lud- gershall -	67 37 0	
Beacon Hill - -	12 48	57806	Beacon Hill - -	107 58 0	26665
Danesbury Camp	139 57	16956	Farley Monument -	15 45 0	93445
Oak Tree, <i>Fullerton Farm</i>	36 15		Chidbury Station -	56 17 0	
Beacon Hill - -	8 27	38245	Highclere Beacon -	38 51	37391
Danesbury Camp -	37 7	9313	Danesbury Camp -	25 33	54381
Barrow near five mile stone	134 26		Tangley Clump	115 36 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Highclere Beacon -	114 21 0	6707	Windmill Hill -	59 32 0	25449
Danesbury Camp -	4 19 0	81178	Danesbury Camp -	30 20 0	43433
Burghclere, <i>Small Clump</i>	61 20 0		Barrow, North of Beacon Hill - - -	90 8	
Highclere Beacon -	61 34	49080	Beacon Hill - -	34 6	58370
Danesbury Camp -	38 13	69766	Thruxton Hill - -	133 9	44854
Popham Beacon -	80 13		Conholt Lodge -	12 45	
Highclere Beacon -	84 7 0	14567	Chidbury Hill - -	117 19 0	12614
Danesbury Camp -	10 42 0	78047	Windmill Hill - -	35 42 0	19206
Hanes Warren Clump	85 11 0		Everley Windmill -	26 59	
Highclere Beacon -	23 52 30	30734	Chidbury Hill -	61 34	16465
Danesbury Camp -	13 57 0	51601	Windmill Hill -	82 16	14615
Lord Portsmouth's House	142 10 30		Collingbourne Windmill	36 10 0	
Highclere Beacon -	18 35 30	36668	Uphaven Down Clump	146 56 0	33894
Danesbury Camp -	15 4 0	44974	Windmill Hill -	17 4 0	63013
Arch Lodge -	146 20 30		Milk Hill, <i>Thorn</i> -	16 0 0	
Beacon Hill - -	16 36	26656	Windmill Hill - -	6 48 0	69115
Windmill Hill -	50 56 0	9808	Fullerton Farm, <i>Oak</i>	150 56	16844
Chidbury Hill Station -	112 28 0		Barrow, near the six mile stone - - -	22 16 0	
Beacon Hill - - -	48 19	42358	Windmill Hill -	12 49 0	47884
Windmill Hill - -	83 35	31833	Fullerton Farm, <i>Oak</i>	95 49 0	12841
Uphaven Down Clump	48 6		Barrow, South of Andover	111 22 0	
Beacon Hill - - -	32 5	36110	Danesbury Camp -	19 56	31768
Windmill Hill - -	86 37	19213	Fullerton Farm, <i>Oak</i>	140 1	16853
Everley Windmill -	61 18 0		Barrow near the six mile stone - - -	20	
Windmill Hill -	27 25 0	22454	Danesbury Camp - -	23 28	26491
Danesbury Camp -	18 45 0	32166	Fullerton Farm, <i>Oak</i> -	24 52	12857
Direction Post on the De vizes Road - - -	133 50 0		Barrow, South of Andover	31 40	
Windmill Hill - -	18 18 0	53906	Danesbury Camp -	74 3	29335
Danesbury Camp -	92 40 0	16944	Chute Common, <i>Asb</i>	29 19 0	57606
Oak Tree, <i>Fullerton Farm</i>	69		Maller's Grove - -	76 38	
Windmill Hill -	10 49 0	16588	Danesbury Camp -	07 55	39702
Danesbury Camp -	5 13 0	34239	Chute Common, <i>Asb</i>	28 11	79986
Kimpton Windmill -	163 58 0		Crawley Clump - -	43 54	
Windmill Hill -	5 0	20048	Danesbury Camp - -	6 29 0	58261
Danesbury Camp -	41 0	54260	Chute Common, <i>Asb</i> -	86 31 0	6591
Chute Steeple -	68 14 0		Chute Common Barrow	87 0 0	
Windmill Hill -	64 34 0	20727			
Danesbury Camp -	14 17 0	45516			
Chute Lodge -	51 9 0				

Names of Stations and inter- sected Objects.	Angles for Calculation	Distances in Feet.	Names of Stations and inter- sected Objects	Angles for Calculation.	Distances. in Feet.
Direction Post -	39 17 0	19750	Beacon Hill -	55 1 0	31739
Danesbury Camp -	36 32 0	21006	Milk Hill, <i>Tborn</i> -	24 18 0	63191
Grateley Spire -	104 11 0		Windmill Hill -	100 41 0	
Direction Post -	46 50	26160	Beacon Hill -	47 34 0	32882
Windmill Hill -	76 34	19617	Milk Hill, <i>Tborn</i> -	24 21 30	58842
Chute Common, <i>Asb</i> -	56 36		Neath Barrow -	108 4 30	
Direction Post -	160 58	10400	Beacon Hill -	78 13	31730
Chute Common, <i>Asb</i> -	5 23	36151	Red Horn Clump -	30 32	61130
Amport Spire -	13 39		Windmill Hill -	71 15	
Direction Post -	97 50	8083	Beacon Hill -	22 40 0	23490
Danesbury Camp -	13 32	34217	Red Horn Clump -	13 35 0	38544
Kimpton Windmill -	68 38		Knighton, Long Barrow	143 45 0	
Chute Common, <i>Asb</i> -	134 50	6615	Beacon Hill -	38 48	63979
Beacon Hill -	4 50	55682	Red Horn Clump -	76 58	41149
Chute Common, Barrow	40 20 0		Chittern Windmill -	64 14 0	
Fullerton Farm, <i>Oak</i> -	13 32	8251	Beacon Hill -	19 22 0	81169
Barrow South of Andover	21 48	5199	Red Horn Clump -	122 56 0	32071
Clatford Steeple -	144 40 0		Ann's Hill Building	37 42	
Chute Common, <i>Asb</i> -	53 11	73376	Beacon Hill -	24 24 0	32869
Beacon Hill -	83 21	59139	Red Horn Clump -	25 56 0	32211
Red Horn, Clump -	43 28		Neath Barrow -	130 40 0	
Chute Common, <i>Asb</i> -	16 37	11004	Windmill Hill -	69 46	45831
Chute Common, Barrow	141 24	5044	Red Horn Clump -	43 31 0	62453
Heydon Hill Clump -	1 59		Lord Elbury's Monument	66 43 0	
Beacon Hill -	5 51 0	57587	Windmill Hill -	76 7 0	40580
Chute Common Barrow	105 18 0	6085	Red Horn Clump -	37 28 0	64762
Tidcombe Down, <i>Asb</i> -	68 51 0		Summer House -	66 25 0	
Tidcombe Down, <i>Asb</i> -	49 42 0	76839	Milk Hill, <i>Tborn</i> -	67 9	21976
Beacon Hill -	82 20 0	59131	Red Horn Clump -	41 14 9	30724
Red Horn Clump -	47 58 0		Bishop's Canning Spire	71 37 0	
Beacon Hill -	65 0 0	75790	Milk Hill, <i>Tborn</i> -	10 17 0	42711
Chute Common Barrow	71 0 0	72627	Red Horn Clump -	143 43 0	12884
Milk Hill, <i>Tborn</i> -	44 0 0		Ellbarrow -	26 0 0	
Beacon Hill -	60 10 0	50782	Milk Hill, <i>Tborn</i> -	79 24	23535
Milk Hill, <i>Tborn</i> -	41 5 0	67034	Red Horn Clump -	40 16 0	35790
Chute Common, <i>Asb</i> -	78 45 0		Pewsey Steeple -	60 20 0	
Beacon Hill -	23 11	59143	Milk Hill, <i>Tborn</i> -	95 48	26121
Milk Hill, <i>Tborn</i> -	47 2	31639	Red Horn Clump -	37 10	43016
Red Horn Clump -	09 2		Pewsey Windmill -	47 2 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Milk Hill, <i>Thorn</i> -	90 16 0	38007	Highclere Beacon -	6 21 0	38315
Red Horn Clump -	50 4 0	49566	Freemantle Park -	34 7 0	19430
Easton Clump -	39 40 0		Burghclere Steeple -	139 32 0	
Milk Hill, <i>Thorn</i> -	59 24	11695	Highclere Beacon -	66 22	27397
Red Horn Clump -	21 24	27588	Freemantle Park -	65 23	27608
Wilcot Hill -	99 12 0		Greenham Direction Post	48 15 0	
Milk Hill, <i>Thorn</i> -	52 0 0	33384	Highclere Beacon -	11 38 20	31904
Red Horn Clump -	67 9 0	28548	Freemantle Park -	141 48 0	10144
Devizes Spire -	60 51		Woolverton Steeple -	26 33 40	
Tidcombe Down -	52 59 0	34428	Highclere Beacon -	15 55 40	41752
Red Horn Clump -	26 6 0	62484	Freemantle Park -	147 2 0	21056
Lord Elbury's Monument	100 55 0		Baughurst Steeple -	17 2 20	
Milk Hill, <i>Thorn</i> -	13 13	36570	Highclere Beacon -	27 29	22034
Devizes Spire -	104 51	8650	Greenham Direction Post	52 20	12846
Pottern Hill, <i>Tree</i> -	61 56 0		Ilchingswell Windmill	100 11 0	
Milk Hill, <i>Thorn</i> -	22 7	42938	Freemantle Park -	81 39	21945
Ellbarrow -	79 43	16480	Greenham Direction Post	40 18	32192
Gibbet Knoll -	78 10		Baughurst Steeple -	58 3 0	
Ellbarrow -	25 48	17437	Highclere Beacon -	63 21 0	46164
Gibbet Knoll -	84 30	7624	Fangley Clump -	67 59 0	44506
Hurshfont Hill -	69 42		Long Parish middle Clump	48 40	
Milk Hill, <i>Thorn</i> -	20 0	23510	Highclere Beacon -	18 34	5051
Wilcot Hill -	142 17	15144	Fangley Clump -	1 5	32279
Pewsey Steeple -	17 43		Sidown Barrow -	158 21 0	
Milk Hill, <i>Thorn</i> -	36 24 0	26099	Milk Hill, <i>Thorn</i> -	71 35 50	43643
Wilcot Hill -	121 1 0	18071	Tidcomb Down, <i>Asb</i>	37 31 10	67991
Pewsey Windmill -	22 35 0		Up Ogbourne Barrow	70 53	
Milk Hill, <i>Thorn</i> -	18 42 0	27944	Up Ogbourne Barrow	29 33 0	22297
Wilcot Hill -	148 46 0	17278	Tidcombe Down, <i>Asb</i>	12 45 0	49826
Rushall Steeple -	12 32		Station S. of Marlborough	137 42 0	
Milk Hill, <i>Thorn</i> -	90 7 0	13971	Milk Hill, <i>Thorn</i> -	2 54 10	67707
Wilcot Hill -	50 0 0	18138	Chute Connan Barrow	34 18 0	6085
Ashington Steeple -	39 53 0		Tidcombe Down, <i>Asb</i>	142 47 50	
Highclere Beacon -	92 23 0	22483	Station S. of Marlborough	48 28 0	2461
Downing Castle -	29 17 0	45926	Up Ogbourne Barrow	66 14 0	10372
Freemantle Park, <i>Fir</i> -	58 20 0		Totterdown Clump -	65 18 0	
Highclere Beacon -	26 59 0	36619	Station S. of Marlborough	26 8	4178
Freemantle Park -	71 27 20	10	Totterdown Clump -	5 37	18801
Cot House on Baughurst Common -	31 34 0		St. Peter's Steeple, Marl- borough -	148 15	



Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Highclere Beacon -	53 11 40	34735	Tidcombe Down, <i>Thorn</i>	65 33 20	21187
Uphursbourne Windmill	67 25 c	30121	Gibbet on Ham Hill -	40 51 40	29482
Gibbet on Ham Hill -	59 23 20		Great Bedwin Steeple -	73 35 0	
Highclere Beacon -	48 43 0	38855	Great Bedwin Steeple	141 46 0	7760
Uphursbourne Windmill	77 0 0	29966	Tidcombe Down, <i>Thorn</i>	9 59 0	27702
Buttermire Hill -	54 17 0		Little Bedwin Spire -	28 15 0	
Uphursbourne Windmill	18 13 0	29948	Buttermire Hill -	87 9 0	5225
Walbury Intrenchment	88 51 0	9364	Uphursbourne Windmill	9 58 0	30152
Buttermire Hill -	72 56 0		Gibbet on Ham Hill -	82 53 0	
Walbury Intrenchment	91 59 10	17437	Highclere Beacon -	31 13 0	69288
Buttermire Hill -	60 13 50	20076	Popham Beacon -	105 50 0	37326
Kintbury Steeple -	27 47 0		Crawley Clump -	42 57 0	
Highclere Beacon -	14 52 0	58394	Highclere Beacon -	50 c 10	27094
Gibbet on Ham Hill -	145 23 0	26373	Popham Beacon -	33 15 0	37855
Station near Hungerford	19 45 c		Hannington Steeple -	96 44 50	
Station near Hungerford	157 30 0	3040	Highclere Beacon -	13 53 0	33124
Gibbet on Ham Hill -	2 17 0	29205	Popham Beacon -	25 10 0	18690
Hungerford Steeple -	20 13 0		Knoll Hill, <i>South Asb</i>	140 57 0	
Tidcombe Down, <i>Asb</i>	77 45 0	23529	Highclere Beacon -	21 37 30	56715
Up Ogbourne Barrow -	20 3 0	67067	Popham Beacon -	99 54 30	21218
Buttermire Hill -	82 12 0		Cranborne Clump -	58 28 0	
Up Ogbourne Barrow -	22 56 0	62443	Highclere Beacon -	45 3 0	19206
Buttermire Hill -	68 33 0	26142	Popham Beacon -	20 57 0	38016
Tidcombe Down, <i>Thorn</i>	88 31 0		Egbury Camp -	114 0 0	
Tidcombe Down, <i>Asb</i> -	43 17 50	23512	Highclere Beacon -	9 37 0	56692
Highclere Beacon -	24 32 25	38823	Crawley Clump -	35 16 0	16403
Buttermire Hill -	112 9 45		Cranborne Clump -	135 7 0	
Tidcombe Down, <i>Asb</i> -	86 34 0	23522	Highclere Beacon -	5 16 0	24845
Lord Elbury's Monument	35 25 0	40516	Knoll Hill, <i>Asb</i>	15 13 0	8688
Buttermire Hill -	58 1 0		Direction Post, King's- sclose Road	159 31 0	
Buttermire Hill	13 39 0	26139	Popham Beacon -	37 34 0	16607
Tidcombe Down, <i>Asb</i>	106 57 0	6449	Cranborne Clump -	51 30 0	12938
Tidcombe Down, <i>Thorn</i>	59 24 0		Stoke Charity Steeple -	90 56 0	
Tidcombe Down, <i>Thorn</i>	58 55 0	55807	Popham Beacon -	58 24 0	18672
Buttermire Hill -	93 12 0	47868	Hannington Steeple -	29 32 0	32263
Albury Steeple -	27 53 0		Knoll Hill, <i>South Asb</i>	92 4 0	
Tidcombe Down, <i>Thorn</i> -	3 28 20	31064	Popham Beacon -	140 37 0	13555
Buttermire Hill -	158 52 0	5218	Hannington Steeple -	17 45 0	28944
Gibbet on Ham Hill	17 39 40		Laverstock Barrow -	121 38 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected objects.	Angles for Calculation	Distances in Feet.
Crawley Clump -	20 34 0	24764	Beacon Hill - -	23 37 0	101366
Popham Beacon -	31 36 0	16602	Bradley Knoll - -	43 46 0	58707
Stoke Charity Steeple -	127 50 6		Whitehorse Hill New Station - -	112 37 0	
Windmill Hill - -	33 13 40	10303	Bradley Knoll -	40 46 0	33762
Beacon Hill - -	2 34 20	125808	Clay Hill Barrow -	80 7 0	22378
Biggs Farm, <i>Asb Tree</i>	144 12 0		Frome Spire - -	59 7 0	
Windmill Hill - -	25 59 0	4818	Bradley Knoll -	41 33 0	31514
Biggs Farm, <i>Asb Tree</i> -	19 28 0	6334	Clay Hill Barrow -	74 26 0	21691
Dummer Steeple -	134 33 0		Frome Asylum -	64 2 0	
Windmill Hill -	29 21 0	23676	Bradley Knoll - -	56 39 0	26555
Biggs Farm, <i>Asb Tree</i>	131 41 0	15538	Clay Hill Barrow -	56 16 0	26674
South Litchfield Barn -	18 58 0		Lord Cork's House -	67 5 0	
Clay Hill Barrow -	9 33 0	66970	Bradley Knoll -	63 25 0	36844
Beacon Hill - -	12 15 0	52366	Clay Hill Barrow -	68 35 0	35393
Yarnsbury Castle -	158 12 0		Whately Spire -	48 0 0	
Beacon Hill - -	59 48 0	52363	Bradley Knoll - -	79 59 0	44163
Salisbury Spire -	65 52 0	49590	Clay Hill Barrow -	63 27 0	48616
Yarnsbury Castle -	54 20 0		Leigh Steeple -	36 34 0	
Beacon Hill - -	13 44 0	64022	Bradley Knoll - -	48 41 0	45853
Yarnsbury Castle -	122 53 0	18098	Clay Hill Barrow -	91 20 0	34450
Chittern Windmill -	43 23 0		Buckland Steeple -	39 53 0	
Beacon Hill - -	16 12 0	42814	Bradley Knoll - -	45 59 0	64748
Yarnsbury Castle -	46 43 0	16408	Clay Hill Barrow -	108 30 0	49099
Maddington Windmill -	117 5 0		Station north of Codford	25 31 0	
Chittern Windmill -	106 33 0	16205	Bradley Knoll -	29 26 0	46167
Yarnsbury Castle -	34 22 0	27518	Clay Hill Barrow -	115 27 0	25125
Upton Barrow - -	39 5 0		Beckington Steeple -	35 7 0	
Clay Hill Barrow -	55 41 0	52703	Bradley Knoll -	34 6 0	93943
Beacon Hill - -	26 31 0	98645	Clay Hill Barrow -	132 34 10	71515
Fonthill Abbey -	96 48 6		Farley Down New Station	13 19 50	
Clay Hill Barrow -	39 7 0	107542	Mendip - -	33 9 20	23573
Beacon Hill - -	63 32 0	75792	Bradley Knoll -	16 58 40	44152
Milk Hill, <i>Tborn</i> -	77 21 0		Leigh Steeple -	129 52 0	
Beacon Hill - -	10 35 10	117240	Mendip - -	36 15 0	38130
Bradley Knoll - -	47 4 50	29412	Bradley Knoll -	35 50 30	33505
Clay Hill Barrow -	122 20 10		Crich Hill - -	107 54 30	
Beacon Hill - -	99 1 36	58085	Bradley Knoll -	58 50 0	36443
Bradley Knoll - -	21 40 7	155360	Leigh Steeple -	50 57 0	40154
Dean Hill - -	59 18 17		Berkeley Lodge -	70 13 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Bradley Knoll - - -	16 35	36914	Clay Hill Barrow -	25 17 0	45819
Leigh Steeple - -	50 12	13713	Milk Hill, <i>Thorn</i> -	16 29 20	68947
Whately Spire - -	13 13		Steeple Ashton -	138 13 40	
Mendip - - -	96 34 0	9014	Farley Clump -	24 32 0	69210
Leigh Steeple - -	20 0	26183	White Horse Hill New Sta.	102 2 0	29383
Benager Steeple -	63 26		Clay Hill Barrow -	53 26 0	
Mendip - - -	41 31	7690	Farley Clump -	44 11	34897
Leigh Steeple - -	15 58	18530	White Horse Hill New Sta.	37 24	40043
Ashwick Steeple -	122 31		Melksham Steeple -	98 25	
Clay Hill Barrow -	4 44	39479	Clay Hill Barrow -	34 43	43448
Station near Codford -	18 28	10285	White Horse Hill New Sta.	104 21	25541
Upton Barrow -	56 48		Trowbridge Spire -	40 56 0	
Clay Hill Barrow -	4 6 0	44815	Clay Hill Barrow -	13 55	24266
Station near Codford -	36 4 0	5443	White Horse Hill New Sta.	45 2	8250
Codford St. Peter Steeple	39 50 0		Westbury Steeple -	21 3	
Clay Hill Barrow -	25 0 30	00429	Clay Hill Barrow -	46 22	53423
Farley Down New Station	114 40 0	46719	White Horse Hill New Sta.	00 57	39383
Rushden Huish Steeple	40 19 3		Bradford Windmill -	32 41 0	
Leigh Steeple - -	14 18	40150	Clay Hill Barrow -	61 56	29537
Clay Hill Barrow -	45 37	13876	White Horse Hill New Sta.	59 17	30317
Berkeley Lodge - -	120 5 0		Road Steeple - -	58 47	
Bradley Knoll - -	10 8	97020	Clay Hill Barrow -	12 9 0	20805
Farley Down New Station	95 14	17141	White Horse Hill New Sta.	25 50 0	19047
Lansdown Clump -	74 38		Windmill near Westbury	42 1	
Farley Down New Station	84 16	26731	Farley Clump - -	68 43	34878
Lansdown Clump - -	61 27	30279	Clay Hill Barrow -	29 53	65228
Hinton Steeple - -	34 17		Melksham Steeple -	81 24	
Farley Down New Station	131 39	8369	Road Steeple - -	132 7	7296
Lansdown Clump - -	15 24	23549	Clay Hill Barrow -	8 56 0	34853
Kingsdown Clump -	32 57		Winchfield Steeple -	38 57 0	
Kingsdown Clump - -	20 30	21833	Clay Hill Barrow -	49 49 0	21595
Farley Down New Station	147 40	14293	Windmill near Westbury	67 8 0	17831
St. Michael's Spire, Bath	11 50		Standerwick House -	63 33 0	
White Horse Hill New Sta.	105 17	56835	Steeple Ashton -	26 16 0	17321
Bradley Knoll - -	36 39	91846	Milk Hill, <i>Thorn</i> -	8 10 0	53962
Farley Clump - - -	38 4		Seend Steeple - -	145 34 0	
White Horse Hill New Sta.	107 36	25551	Clay Hill Barrow -	44 59	62628
Bradley Knoll - -	20 8	70756	Farley Down New Station	58 25	51969
Trowbridge Spire -	52 16		Seend Steeple - -	76 36 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation	Distances in Feet.
Farley Down New Station	48 4 0	29296	Compton Clump	52 38 0	9309
Seend Steeple	33 56 0	39041	Barrow near Barford	72 33 0	7755
Corsham Spire	98 0 0		Barford St. Martin Steeple	54 49 0	
Clay Hill Barrow	43 43 0	48443	Compton Clump	32 43 0	8317
Melksham Steeple	47 56 0	45098	Barn near Wilton	21 30 0	12265
Hinton Steeple	88 21 0		Three Fir Trees south of Barford	125 47 0	
Hinton Steeple	59 55 0	42785	Compton Clump	127 25 0	14112
Clay Hill Barrow	53 54 0	45820	Three Fir Trees	33 34 0	20272
Steeple Ashton	66 11 0		Baverstock Steeple	19 1 0	
Clay Hill Barrow	39 48 0	13514	Mendip	60 12 20	85802
Station near Codford	12 34 0	39647	Dundry	70 21 20	79062
Barrow on Limekiln Hill	127 46 0		Farley Down New Station	49 25 20	
Clay Hill Barrow	33 42 0	14265	Farley Down New Station	13 20 0	41069
Limekiln Hill Barrow	78 15 0	8084	Dundry	13 37 0	40230
Bishopstrow Spire	68 3 0		Stantonbury Hill	153 3 0	
Beacon Hill	15 57 0	98670	Stantonbury Hill	59 33 0	15781
Bradley Knoll	33 52 0	48656	Dundry	22 53 0	34986
Fonthill Abbey	130 11 0		Pollard on Beacon Hill	97 34 0	
Bradley Knoll	32 36 0	15674	Dundry	13 49 0	45377
Fonthill Abbey	18 17 0	33787	Stantonbury Hill	109 39 0	11485
Kingston Deverill Hill	129 7 0		Priest Barrow	56 42 0	
Bradley Knoll	11 18 0	19725	Stantonbury Hill	66 21 0	9346
Kingston Deverill Hill	85 6 0	38792	Beacon Hill, Pollard	35 26 0	14767
Kingston Deverill Spire	83 36 0		Compton Dando Steeple	78 13 0	
Compton Clump	143 52 20	14111	Stantonbury Hill	21 34 0	4649
Ridge Hill	11 32 0	41611	Beacon Hill, Pollard	8 29 0	11584
Fonthill Abbey	24 35 40		Marksbury Steeple	149 57 0	
Ridge Hill	56 4 0	5679	Stantonbury Hill	115 52 0	18129
Fonthill Abbey	23 18 0	11912	Beacon Hill, Pollard	34 33 0	28763
Thirteen mile stone	100 38 0		Keynsham Steeple	29 35 0	
Fonthill Abbey	16 6 0	54322	Stantonbury Hill	28 0 0	20199
Compton Clump	125 5 0	18409	Beacon Hill, Pollard	102 13 0	9702
Barn north of Wilton	38 49 0		Stantonwick Glass House	49 47 0	
Barn near Wilton	21 46 0	12973	Stantonbury Hill	158 43 0	10407
Compton Clump	37 6 0	7975	Beacon Hill, Pollard	81 26 0	25277
Barrow South of Barford	121 8 0		Newton Steeple	12 51 0	
Barn near Wilton	63 39 30	7302	Stantonbury Hill	11 33 0	25276
Barrow near Barford	33 55 0	11728	Keynsham Steeple	142 40 0	8345
Wilton Steeple	82 25 30		Dr. Foxe's House	25 47 0	

Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.
Dundry -	49 27	33738	White Horse Hill	13 12 0	31519
Beacon Hill Pollard	63 1	23707	Roundaway Castle	152 29 0	15578
Keynsham Steeple	67 32		Beenham Spire		

ART. VIII. *Secondary Triangles for the Survey of the County of Sussex.*  
*Plate VIII.*

The Distances serving as Base Lines for the following Triangles are

Chanctonbury Ring to	{ Highdown Windmill - - - -	29442
	{ Lord Egremont's Summer House	70219
Leith Hill to -	{ Crowborough Beacon -	128332
	{ Horsham Spire -	43558

Highdown Windmill -	55 24 0	40715	Egremont's Summer House	47 10 0	21750
Chanctonbury Ring -	79 19 0	34105	Hascombe Hill Telegraph	22 14	42153
Shoreham Steeple -	45 17 0		Black Down Telegraph	110 36	
Highdown Windmill -	63 53	12676	Egremont's Summer House	75 51 0	62204
Chanctonbury Ring -	25 30	26438	Hascombe Hill Telegraph	57 23 0	71610
West Tarring Spire -	90 37		Shipley Spire	46 46 0	
High Down Windmill	36 6	27110	Egremont's Summer House	74 25	71780
Chanctonbury Ring -	64 50	17668	Hascombe Hill Telegraph	63 28 0	77281
Step Down - - -	79 4		Grinstead Park House	42 7 0	
Highdown Windmill -	62 52	29390	Egremont's Summer House	18 39 0	44179
Chanctonbury Ring -	58 26	30681	Hascombe Hill Telegraph	49 57 0	18502
Lancing, Great House	58 39		Alfold Spire - - -	111 34 0	
Highdown Windmill -	54 57	29640	Egremont's Summer House	59 57	44018
Shoreham Steeple -	45 41	33914	Hascombe Hill Telegraph	50 11	49605
Chanctonbury Fire Beacon	79 22		Billinghurst Spire -	69 52	
Highdown Windmill -	45 43	8194	Egremont's Summer House	43 44 0	22961
Shoreham Steeple -	9 31	35482	Hascombe Hill Telegraph	23 6	40458
Goring Spire -	124 46		Kirford Steeple -	113 10 0	
Shoreham Steeple -	19 6	20688	Hascombe Hill Telegraph	72 19 0	18520
Chanctonbury Fire Beacon	25 14	15879	Blackdown Telegraph -	25 47	40566
Bramber Castle - -	135 40		Alfold Spire - - -	81 54	
Egremont's Summer House	0 11	70420	Hascombe Hill Telegraph	102 38	31156
Chanctonbury Ring -	134 41	301	Black Down Telegraph	31 50	57636
Chanctonbury Fire Beacon	48 8		Rudgwick Steeple -	45 32	
Egremont's Summer House	102 5	53806	Hascombe Hill Telegraph	103 19 0	60675
Chanctonbury Fire Beacon	32 2	97703	Black Down Telegraph	46 27	81465
Hascombe Hill Telegraph	44 38		Horsham Spire -	30 14	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Rooks Hill - -	88 51 16	73754	Egremont's Summer House	79 25 0	50893
Chichester Spire -	74 55	76370	Black Down Telegraph	76 2 0	51560
High Down Windmill	16 13 36		Beacon Hill Telegraph	24 30 0	
Chichester Spire -	9 59	52205	Egremont's Summer House	49 1 0	9905
Highdown Windmill -	19 56	26546	Black Down Telegraph	26 7 0	16986
Arundel Spire -	150 5 0		Red Hill Windmill -	104 52 0	
Chichester Spire -	20 33 40	76355	Egremont's Summer House	90 53 0	27943
Highdown Windmill -	79 41 20	27257	Black Down Telegraph	46 4 0	31855
Storrington Hill, Barrow	79 45		Kirford Steeple -	43 3 0	
Chichester Spire -	29 56	52187	Egremont's Summer House	114 27 0	26986
High Down Windmill	39 54	40597	Black Down Telegraph	36 44 0	41073
Bury Hill - -	110 10		Keyshot Hill, Barrow	28 49 0	
Bury Hill - -	41 35 30	26277	Black Down Telegraph	16 38 0	7449
High Down Windmill	39 47 20	27257	Red Hill Windmill -	12 13 0	12077
Storrington Hill Barrow	98 37 10		Lurgershall Spire -	151 9 0	
Bury Hill - -	39 23	24396	Harcombe Hill Telegraph	56 57 0	31162
High Down - -	35 27	26688	Kirford Steeple -	48 4 0	35111
Storrington Hill, Tree	105 10 0		Rudgwick Steeple -	74 59 0	
Bury Hill - -	31 53	56868	Egremont's Summer House	54 44	52579
Storrington Hill Barrow	126 14	37238	Billinghurst Spire -	72 21	45050
Shipley Spire - -	21 53		Ash Tree, above Torrington	52 55	
Bury Hill - -	32 4 0	35673	Egremont's Summer House	42 40 0	25126
Storrington Hill Barrow	101 47 20	19347	Ash Tree, above Torrington	26 32 0	38119
Warminghurst Spire -	46 8 40		Duncton Fire Beacon -	110 48 0	
Bury Hill - -	54 8	25954	Black Down Telegraph	41 51	9210
Storrington Hill, Tree	66 24	22952	Red Hill Windmill -	31 15	11844
Pulborough Spire -	59 28 0		North-Chapel Spire -	06 54	
Bury Hill - -	51 55	25970	Black Down Telegraph	65 44	15772
Storrington Hill Barrow	53 21	22871	Red Hill Windmill -	53 51	17807
Pulborough Spire -	04 44		Shillingly, Park Lodge	60 25	
Bury Hill - -	9 5	32788	Egremont's Summer House	52 44	8166
Storrington Hill Barrow	39 41	8000	Duncton Fire Beacon -	17 51	21202
Sullington Windmill -	31 14 0		Petworth Steeple -	09 25	
Steep Down - -	52 12	8917	Egremont's Summer House	47 25	20805
Chanctonbury Ring -	28 24	14150	Duncton Fire Beacon -	54 12	18887
Intrenchment, Gisbury Hill	99 24 0		Codmoor Hill -	78 23	
Egremont's Summer House	07 8	21749	Duncton Fire Beacon	36 20 0	15576
Billinghurst Spire	22 24	54540	Codmoor Hill - -	55 31 0	11196
Blackdown Telegraph -	50 28		Waterfield Windmill -	88 9 0	

Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.
Duncton Fire Beacon -	59 47 0	23151	Duncton Fire Beacon -	44 0 0	15872
Codmoor Down -	70 7 0	21274	Waterfield Windmill -	69 20 0	31654
Amberley Steeple -	50 6 0		Bury Hill -	66 40 0	
Duncton Fire Beacon -	23 27 0	23131	Duncton Fire Beacon -	116 21 0	21234
Waterfield Windmill -	121 31 0	10798	Bury Hill -	36 57 0	31654
Amberley Steeple -	35 2 0		Petworth Steeple -	26 42 0	
Amberley Steeple -	39 12 0	19426	Arundel Spire -	55 19 0	8356
Codmoor Down -	63 8 0	13763	Highdown Windmill -	17 30 0	22849
Pulborough Spire -	77 40 0		Leominster Steeple -	107 11 0	
Duncton Fire Beacon -	20 15 0	15910	Highdown Windmill -	158 57 0	8188
Amberley Steeple -	33 50 0	9899	Arundel Spire -	4 55 0	34314
Bury Hill -	25 55 0		Goring Spire -	16 8 0	
Amberley Steeple -	91 26 0	10006	High Down Windmill	46 39 0	21234
Bury Hill -	44 35 0	14251	Arundel Spire -	52 13 0	19537
Cold Waltham Steeple	43 59 0		Little Hampton Windmill	81 8 0	
Heyshot Hill Barrow -	87 57 0	32644	Highdown Windmill	54 32 0	10774
Black Down Telegraph	39 16 0	51544	Arundel Spire -	23 23 0	22111
Beacon Hill Telegraph	52 47 0		Preston Spire -	102 5 0	
Heyshot Hill Barrow -	58 31 0	17073	Highdown Windmill -	47 22 0	15305
Beacon Hill Telegraph	31 32 0	27839	Arundel Spire -	34 50 0	19713
Midhurst Steeple -	89 57 0		Rustington Steeple -	97 48 0	
Heyshot Hill Barrow -	116 40 0	27063	Crowborough Beacon -	0 1 10	128338
Beacon Hill Telegraph -	28 21 0	50881	Leith Hill Station -	98 35 0	44
Egremont's Summer House	34 59 0		Leith Hill Tower -	81 23 50	
Beacon Hill Telegraph	34 57 0	13623	Horsham Spire to Leith Hill 43558.		
Midhurst Steeple -	25 5 0	18409	Horsham Spire -	0 2 16	43526
Barrow, east of Beacon Hill	119 58 0		Leith Hill -	41 20 0	44
Beacon Hill Telegraph	71 58 0	5405	Leith Hill Tower -	138 37 44	
Barrow, east of Beacon Hill	23 10 0	13008	Leith Hill Tower -	27 1 0	44658
Elsted Steeple -	84 46 0		Horsham Spire -	79 33 0	20628
Beacon Hill Telegraph	89 45 0	33469	Colgate Hill Fire Beacon	73 26 0	
Barrow east of Beacon Hill	68 40 0	36081	Leith Hill Tower -	30 14 0	44665
Milland House -	22 11 0		Crowborough Beacon	14 4 0	92526
Beacon Hill Telegraph -	31 44 20	13628	Colgate Hill Fire Beacon	135 42 0	
Egremont's Summer House	10 20 20	39945	Crowborough Beacon -	74 22 0	72134
Barrow, east of Beacon Hill	137 55 20		Leith Hill Tower -	32 32 0	129169
Egremont's Summer House	70 12 0	42353	Mount Harry Fire Beacon	73 6 0	
Barrow east of Beacon Hill	57 17 0	47363			
Lynchmere Steeple -	52 31 0				

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Crowborough Beacon -	18 10	103650	Crowborough Beacon -	7 3 30	26020
Leith Hill Tower -	47 16	43996	Witchcross Beach -	56 27	3136
Reigate West Windmill	114 34		Witchcross Clump -	16 29 30	
Crowborough Beacon -	21 0	77497	Reigate West Mill -	66 53 0	42672
Leith Hill Tower -	26 23	62498	Leith Hill Tower -	55 14 0	47775
Outwood Smock Windmill	132 37		Crawley Steeple -	57 53 0	
Crowborough Beacon -	69 51 0	54107	Leith Hill -	37 30 0	21443
Mount Harry Beacon -	43 31 0	73770	Reigate West Windmill	26 27	48096
Selswell Windmill -	66 38 0		Shire Mark Windmill	66 3	
Crowborough Beacon -	64 10 30	48316	Reigate West Windmill	14 59 0	55617
Mount Harry Beacon -	40 24 30	67691	Crawley Steeple -	127 33 0	18136
West Hoathley Spire -	75 25 10		Colgate Fire Beacon -	37 28 0	
Crowborough Beacon -	63 18 0	27943	Crawley Steeple -	38 31 0	35518
Mount Harry Beacon -	22 44 0	61598	Reigate West Windmill	56 4 0	20659
Witchcross Beech -	93 58 0		Outwood Smock Windmill	85 25 0	
Crowborough Beacon -	77 48 30	14321	Mount Harry Fire Beacon	11 23 0	30223
Mount Harry Beacon -	11 27 0	70514	Selswell Windmill -	7 38 30	4006
Deal Mount Clump -	90 44 30		Chailey Windmill -	160 58 30	
Leith Hill Tower -	29 15 30	74532	Leith Hill Tower -	26 13 0	81651
Mount Harry Beacon -	29 35 30	73767	Selswell Windmill -	87 58	36093
Selswell Windmill -	121 9 0		Cuckfield Spire -	65 49	
Selswell -	38 21 0	7699	Crowborough Windmill	14 41 0	14350
Crowborough Beacon -	5 40 30	48306	Reigate West Windmill	2 19 0	89861
West Hoathley Spire -	135 58 30		Deal Mount Clump -	163 0 0	
Crowborough Beacon -	22 38 0	103623	Reigate West Windmill	12 59	62775
Selswell Windmill -	136 10 0	57579	Crowborough Windmill	18 22	44759
Reigate West Windmill	21 12 0		Beech Hill, Tree -	148 39	
Crowborough Beacon -	30 30	69991	Mount Harry -	32 18	47313
Selswell Windmill -	99 54	30060	Chailey Windmill -	11 23	27151
Cuckfield Spire -	49 36		Maresfield Steeple -	36 19	
Selswell Windmill -	55 13	35720	Chailey Windmill -	13 47 30	31790
Crowborough Beacon -	41 1	44703	Selswell Windmill -	27 46 30	15491
Beech Hill, Tree -	83 46		Ardingly Spire -	32 6 0	
Crowborough Beacon -	26 22	44692	Chailey Windmill -	147 51 0	31811
Witchcross Beech -	121 22	23245	Mount Harry Beacon -	16 32 0	59486
East Grinstead Spire -	32 16		Ardingly Spire -	15 37 0	
Crowborough Beacon -	67 35	41531	Crawley Steeple	105 28 0	21288
Witchcross Beech -	78 30	40256	Leith Hill Tower	21 0 0	57255
Mark Beech, Oak -	39 55 0		Burston Spire	53 32 0	



Names of Stations and intersected Objects.	Angles for calculation	Distances in Feet.	Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.
Crawley Steeple -	70 4 c	20665	Crawley Steeple -	14 34	49448
Leith Hill Tower -	25 30 c	45126	Outwood Smock Windmill	134 49	17532
Horley Steeple -	84 26 c		Nutfield Windmill	30 38 o	
Leith Hill Tower -	9 10 c	56854	Crawley Steeple -	33 16	23542
Crawley Steeple -	132 41 o	12321	Outwood Smock Windmill	39 12	20432
Kilgate Heath, House	38 9 o		Capt Thorn Windmill	107 32 o	
Deal Mount Clump	107 52 o	34894	Outwood Smock Windmill	28 20	19313
Crowborough Beacon -	53 0 o	41585	Crawley Steeple -	26 20	20663
Mark Beech -	19 8 o		Horley Spire -	125 20 o	
Mark Beech -	21 40	39937	Outwood Smock Windmill	11 49 o	26730
Deal Mount Clump -	98 34	14911	Crawley Steeple -	30 20 o	10839
Crowborough Windmill	59 46		Lowfield Heath Windmill	137 51 o	
Mark Beech -	19 21 30	36574	Crawley Steeple -	23 41	21274
Deal Mount Clump	88 10 o	12129	Nutfield Windmill -	15 55	31160
Witchcross Large Clump	72 28 30		Burstow Spire -	140 24 o	
Mark Beech -	23 52 o	7749	Crawley Spire -	47 53 o	23528
Deal Mount Clump -	6 26 o	27984	Nutfield Windmill -	27 24 o	37923
Cowden Spire -	149 42 o		Capt Thorn Windmill	104 43 o	
Witchcross, Beech -	16 4	3844	Crawley Steeple -	101 40 o	20921
Mark Beech -	1 40	36578	Nutfield Windmill -	20 53 30	57455
Witchcross, Large Clump	162 16		Rusper Steeple -	57 26 30	
Mark Beech -	40 50 o	39923	Nutfield Windmill -	16 11 o	39648
Witchcross, Large Clump	76 17 o	26870	Capt Thorn Windmill	90 48 o	11051
Crowborough Windmill	62 53 o		Felbridge Monument	73 1 o	
Witchcross Large Clump	38 39 o	36535	Colgate Fire Beacon -	67 23 30	15965
Crowborough Windmill	94 10 o	22879	Crawley Steeple -	50 51	19005
Groombridge Steeple	47 11 o		Hand Cross Clump -	61 45 30	
Deal Mount Clump -	81 44 o	28043	Reigate West Windmill	14 29	61660
Witchcross Large Clump	73 44 o	28308	Colgate Fire Beacon -	104 50	15953
Cowden Spire -	24 32 o		Hand Cross Clump	60 41	
Deal Mount Clump	99 26 o	12939	Leith Hill Tower -	38 2 o	33821
Witchcross Large Clump	41 51 o	19130	Colgate Fire Beacon -	49 9 o	27548
Hartfield Spire -	38 43 o		Charlewood Steeple -	92 49 o	
Deal Mount Clump -	118 9 o	12458	Leith Hill Tower -	64 36 30	28843
Witchcross Large Clump	31 23 o	21093	Nutfield Windmill -	26 57 30	57480
Withyham Steeple -	30 28 o		Rusper Steeple -	88 26 o	
Leith Hill Tower -	15 56 30	63603	Crawley Steeple -	12 9	12927
Outwood Smock Windmill	85 36 30	17520	Hand Cross Clump -	20 20	7448
Nutfield Windmill	78 27 o		Kilgate Heath, House -	147 31 o	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Outwood Smock Windmill	73° 30' 0"	26706	Maresfield Steeple -	115° 3' 0"	15259
Reigate West Windmill	53 19 0	31929	Mount Harry -	14 25 0	55522
Lowfield Heath Windmill	53 11 0		Netley End, <i>Large Fir</i>	50 32 0	
Maresfield Steeple -	46 35	12207	Chanctonbury Ring -	9 45 1	60736
Mount Harry Fire Beacon	12 50	39921	Leith Hill Station -	13 39 33	43558
Fletching Spire -	120 35 0		Horsham Spire -	156 35 27	

ART. IX. *Secondary Triangles for the Survey of the County of Surrey.*

*Plate 9.*

The Distances serving as Base Lines for the following Triangles are

Hundred Acres to	Hanger Hill Tower	71932 Feet.
St. Ann's Hill to	Hanger Hill Tower	68896
	Banstead	76688
	Sunbury Steeple	26022
	Stanwell Spire	23720
	King's Arbour	34455
Severndroog Tower to	Bagshot Heath	46955
	Hanger Hill Tower	84375
	Bromley Steeple	24930

Hundred Acres	42 3 56	35957	St. Ann's Hill -	143 48 <sup>8</sup> 0	476
Hanger Hill	28 2 10	51254	Banstead Spire -	0 12 12	79324
Streatham Spire	109 53 54		St. Ann's Clump	35 59 48	
Hundred Acres	27 51 56	47896	Banstead -	15 13 40	14545
Streatham Spire	105 55 10	23279	Harrow Spire -	2 36 20	84035
Fulham Steeple	46 12 54		Yewell Steeple -	162 10 0	
St. Ann's Hill	62 10 10	78939	Banstead -	32 11 0	11276
Hanger Hill Tower	65 20 40	76811	Yewell Steeple -	50 13 0	7815
Banstead Spire	52 29 10		Epsom Spire -	97 36 0	
St. Ann's Station	15 15 40	48919	Hanger Hill Tower	58 57 20	76811
Banstead Station	25 23 12	33062	Severndroog Tower	55 46 35	79580
Cockrow Hill	137 45 58		Banstead Spire -	65 16 5	
St. Ann's Hill	79 1 50	77301	Banstead Spire -	18 56 0	55614
Banstead Station	50 45 40	97982	St. Ann's Hill, Clump	34 2 0	32242
Harrow Spire	59 12 30		Pain's Hill Spire -	127 2 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.		Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Fect.
Pain's Hill Spire -	40 22	5911	Woking Monument -	33 7 0	16093
St. Ann's Clump -	7 51 30	28001	Pain's Hill Spire -	46 26 0	12135
George's Tree -	131 46 30		Ockham Steeple -	100 27 0	
Banstead Spire -	6 5 0	55587	Woking Monument -	63 16 30	26343
Pain's Hill Spire -	86 42 0	5900	Pain's Hill Spire -	66 59 0	25564
George's Tree -	87 13 0		West Horseley Mill -	49 44 30	
Pain's Hill -	78 2 0	7595	Woking Monument -	123 16 0	28232
George's Tree -	59 46 0	8599	Pain's Hill Spire -	32 18 30	44167
Byfleet Spire -	42 12 0		Guildford Steeple -	24 25 30	
Pain's Hill -	76 22 0	19751	Guildford Steeple -	9 38 0	31754
George's Tree -	86 16 30	19235	Woking Monument -	120 3 0	6139
Holly, Okeshut Warren	17 21 30		Pirford Steeple -	50 19 0	
St. George's Tree -	60 29 0	28023	Guildford Steeple -	119 51 0	12123
Holly, Okeshut Warren	77 27 0	24983	Woking Monument -	17 3 30	35843
Effingham Steeple -	42 4 0		Yew Tree, Hog's Back	43 5 30	
Pain's Hill Spire -	5 50	26932	Guildford Steeple -	47 59	15875
Holly, Okeshut Warren	158 45 30	7555	Woking Monument -	33 49	21192
Cabbage Hill Telegraph	15 24 30		Worplesdon Steeple -	98 12	
Pain's Hill Spire -	27 46 0	29622	Guildford Steeple -	52 48	10642
Cabbage Hill Telegraph	87 0 30	13819	Woking Monument -	21 15	23388
Leatherhead Steeple -	65 13 30		Marrow Steeple -	105 57	
St. Ann's Clump -	39 23 8	32574	Guildford Steeple -	92 56	31646
Pain's Hill Spire -	71 7 40	21842	Woking Monument -	46 38	43474
Woking Monument	69 29 20		Romping Down, Clump	40 26	
St. Ann's Clump -	57 25 0	49605	Guildford Steeple -	20 22 0	49083
Pain's Hill Spire -	82 28 0	42161	Woking Monument -	136 9 0	24658
Worplesdon Steeple -	40 7 0		George's Tree -	23 29 0	
St. Ann's Clump -	45 19	60450	Guildford Steeple -	68 20	15891
Pain's Hill Spire -	103 26	44189	George's Tree -	18 52	45669
Guildford Steeple -			Worplesdon Steeple -	92 48 0	
Woking Monument -	133 25 30	21210	Woking Monument -	116 49 0	31179
St. Ann's Clump -	18 5 30	49606	George's Tree -	35 42 0	47684
Worplesdon Steeple -	28 29 0		St. Martha's Chapel -	27 29 0	
Woking Monument -	102 2 30	23375	Woking Monument -	64 39 0	29134
Pain's Hill Spire -	40 33 0	35164	George's Tree -	65 10 0	29011
Marrow Steeple -	37 24 30		East Horseley Steeple -	50 11 0	
Woking Monument -	66 22	37962	Woking Monument -	17 39	29033
Pain's Hill Spire	79 13	35404	George's Tree -	108 52	9302
Nettlebeath Telegraph	34 25		Cobham Spire -	53 29 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Woking Monument -	120 6 0	9342	Kingston Steeple -	102 54 0	14740
George's Tree -	15 24 0	30435	Sunbury Steeple -	27 45 0	30861
Horsehill Steeple -	44 30 0		Star and Garter Inn, Rich- mond -	49 21 0	
Woking Monument -	79 16 0	37957	Cockcrow Hill -	99 46 0	27627
George's Tree -	64 45 0	41233	Kingston Steeple -	62 23 0	30727
Nettleheath Telegraph -	35 59 0		Sutton Steeple -	17 51 0	
Guildford Steeple -	71 49 0	12116	Cockcrow Hill -	87 7 0	11365
Worplesdon Steeple -	43 38 0	16720	Kingston Steeple -	51 38 0	14477
Yew Tree, Hog's Back -	64 33 0		Maldon Steeple -	41 15 0	
Yew Tree, Hog's Back -	82 51 0	22739	Woking Monument -	153 53 0	6145
Worplesdon Steeple -	58 23 0	26495	Worplesdon Steeple -	5 47 0	26847
Ash Spire -	38 46 0		Pirford Steeple -	20 20 0	
East Horseley Steeple -	17 14 0	27188	Yew Tree, Hog's Back -	104 15 0	22764
George's Tree -	69 18 0	8610	Woking Monument -	28 1 30	46958
Byfleet Spire -	93 28 0		Ash Spire -	47 43 30	
St. Ann's Hill -	11 24 0	48919	Yew Tree, Hog's Back -	14 47 0	36495
Sunbury Steeple -	156 12 30	23968	Woking Monument -	86 35 0	9329
Cockcrow Hill -	12 23 30		Horsehill Steeple -	78 38 0	
St. Ann's Hill -	79 1 30	14206	Yew Tree, Hog's Back -	28 2 0	43587
Sunbury Steeple -	30 53 0	27170	Woking Monument -	97 19 0	20654
Staines Steeple -	70 5 30		Chobham Spire -	54 39 0	
St. Ann's Station -	27 14 0	20959	Yew Tree, Hog's Back -	13 15 0	43573
Sunbury Steeple -	52 24 0	12106	Horsehill Steeple -	120 39 0	11609
Oatlands, Temple -	100 22 2		Chobham Spire -	46 6 0	
Sunbury Steeple -	37 20 0	55141	St. Ann's Hill -	20 14 0	14195
Cockcrow Hill -	120 43 30	38901	Stanwell Spire -	25 16 0	11501
Headley Steeple -	21 56 30		Staines Steeple -	134 30 0	
Sunbury Steeple -	45 52 0	19230	St. Ann's Hill -	31 29 32	14304
Cockcrow Hill -	52 32 0	17389	Bagshot Heath -	12 8 5	35553
Ellis's Summer House -	81 36 0		Duke of Gloucester's Tower -	136 22 3	
Sunbury Steeple -	13 53 0	9069	St. Ann's Hill -	81 58 10	20959
Cockcrow Hill -	8 10 0	15319	King's Arbour -	33 21 20	37745
West Moulsey Steeple -	157 57 0		Oatlands, Temple -	64 40 30	
Sunbury Steeple -	22 58 30	24020	St. Ann's Hill -	38 44 0	476
Cockcrow Hill -	78 49 0	9557	Staines Steeple -	1 14 0	13827
Kingston Steeple -	78 12 30		St. Ann's Hill Clump -	140 2 0	
Sunbury Steeple -	99 11 0	6670	Staines Steeple -	17 17 0	16382
West Moulsey Steeple -	33 1 0	12086	St. Ann's Hill -	106 84 0	5078
Walton Steeple -	47 48 0		Chertsey Steeple -	56 9 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Staine's Steeple -	18 29 0	16391	Severndroog Tower -	5 0 30	60553
St. Ann's Hill Clump	108 18 0	5473	Combehurst - -	144 45	9159
Chertsey Steeple -	53 13 0		Beggar's Bush - -	30 14 30	
St. Ann's Hill Clump	45 2 0	19509	Banstead Down, Pollard	21 31	23519
Staines Steeple -	89 50 0	13803	Combehurst - -	65 37	9471
Ashford Spire -	45 8 0		Croydon Steeple -	92 52	
St. Ann's Hill Clump	15 16 0	28069	Banstead Down, Pollard	84 24 0	34063
Staines Steeple -	58 35 0	22450	Combehurst - -	56 28 0	40658
Feltham Spire -	29 9 0		Wimbledon Spire -	39 8 0	
St. Ann's Hill Clump -	38 50 0	27474	Combehurst - -	69 37 30	9168
Staines Steeple -	113 44 0	18819	Croydon Steeple -	53 51 0	10641
Bedfont Steeple -	27 26 0		Beggar's Bush - -	56 31 30	
St. Ann's Hill Clump	79 4 0	13887	Combehurst - -	50 25 0	22189
Staine's Steeple -	50 37 0	17641	Croydon Steeple -	105 16 0	17726
Duke of Gloucester's Tower	50 19 0		Caeshalton Windmill	24 19 0	
St. Ann's Clump -	27 14 0	12999	Combehurst - -	154 7 0	5811
Staines Steeple -	69 7 0	6366	Croydon Steeple -	9 47 30	14916
Egham Spire - -	83 39		Sanderstead Spire -	16 5 30	
St. Ann's Hill Clump	21 21 3	3329	Combehurst - -	114 40 30	18330
Staines Steeple - -	6 27 0	10794	Croydon Steeple -	44 12 30	23888
Thorpe Steeple - -	152 11 30		Coulsdon Spire - -	21 7 0	
St. Ann's Hill Clump -	58 29	9000	Combehurst - -	84 50	30476
Staine's Steeple -	40 4 0	11920	Beggar's Bush - -	78 3 0	31024
Leleham Steeple -	81 27 0		Streatham Spire -	17 7 0	
Severndroog Tower -	44 2 10	29989	Combehurst - -	26 45 30	28036
Bromley Steeple -	80 48 50	21116	Streatham Spire - -	66 40 30	13746
Sydenham Common -	55 9 0		Mitcham Steeple -	86 34 0	
Severndroog Tower -	31 55 0	52842	Combehurst - -	10 57	30857
Sydenham Common -	118 1 0	31646	Mitcham Steeple -	111 5	6282
Combehurst - -	30 4 0		Tooting Steeple -	57 58	
Severndroog Tower -	10 55 0	42804	Combehurst - -	51 11 30	19636
Sydenham Common -	146 3 0	14515	Bromley Steeple -	42 38 0	22592
Buxton Windmill -	23 2 0		Norwood House -	86 10 30	
Bromley Steeple -	76 40 0	28927	Combehurst - -	16 22 30	24499
Sydenham Common -	62 50 0	31638	Bromley Steeple -	51 52 30	8781
Combehurst - -	40 30 0		Beckingham Spire -	111 45 30	
Severndroog Tower -	12 37 40	74522	Croydon Steeple - -	76 29 0	31043
Combehurst - -	140 45 41	25790	Banstead Down, Pollard	61 41 0	34286
Pollard, Banstead Down	26 36 40		Earl Spencer's House -	41 50 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Combehurst - -	134 48 30	24498	Borley Hill - -	99 54 0	14052
Banstead Down, Pollard	21 59 0	46282	Leith Hill - - -	8 17 0	96084
Beckingham Spire -	23 12 30		Golden Square - -	71 49 0	
Combehurst - -	88 27 0	5806	Golden Square - -	31 38 0	14911
Banstead Down, Pollard	12 45 30	26282	Borley Hill - - -	80 9 30	7937
Sanderstead Spire -	78 47 30		Tatesfield Spire -	68 12 30	

ART. X. *Secondary Triangles for the Survey of Middlesex and Hertfordshire. Plate 10.*

The Distances serving as Base Lines for the following Triangles are,

Hampstead Heath to	{	Severndroog Tower - -	64855 Feet
		High Beech - - -	59455
Stanmore Station to	{	Pen Steeple - - -	75325
		Kensworth - - -	98577
		Hanger Hill Tower - -	37431
Highgate Chapel to Argyle Street Observatory	-	-	20766
Lillyhoe to Royston	-	-	79867

Severndroog Tower -	19 34 54	84374	Stanmore Station - -	61 20 48	29035
Hampstead Heath -	117 22 12	31843	Harrow Spire - -	82 21 0	25708
Hanger Hill Tower -	43 2 54		Hendon Steeple - -	36 18 12	
Hampstead Heath -	115 39 58	43671	Harrow Spire - -	25 7 0	25727
Highbeech - -	26 04 7	87699	Hampstead Spire - -	40 4 30	16962
Stanmore Station -	37 39 55		Hendon Steeple -	114 48 30	
Stanmore Station -	5 40 53	48315	Harrow Spire - -	121 40 0	27838
Hampstead Heath -	132 39 30	6504	Hampstead Spire -	24 58 0	56134
Highgate Chapel -	41 39 37		Hayes Steeple - -	33 22 0	
Pen Steeple - -	12 21 17	79992	Harrow Spire - - -	45 9 0	11968
Stanmore Station -	99 20 18	17345	Stanmore Station -	43 37 0	12308
Harrow Spire - -	68 18 25		Pinner Steeple - -	91 14 0	
Stanmore Station -	10 17 51	17345	Harrow Spire - - -	97 56 0	42784
Hanger Hill Tower -	8 39 23	20553	Stanmore Station -	61 14 15	48334
Harrow Spire - -	161 2 46		Highgate Chapel -	20 49 10	
Stanmore Station -	40 38 20	44667	Harrow Spire - -	48 1 0	16500
Hanger Hill Tower -	83 4 10	29305	Stanmore Station -	62 47 0	13792
Hampstead Spire -	56 17 30		Little Stanmore Steeple	69 12 0	
Stanmore Station -	350 46 12	17343	Harrow Spire - -	80 47 0	20151
Hampstead Spire -	21 44 17	36274	Stanmore Station -	54 39 0	24398
Harrow Spire - -	107 29 31		Rushlip Steeple -	44 34 0	

Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.
Harrow Spire -	68 12 0	31302	Kensworth - -	18 16 0	107253
Hanger Hill Tower -	58 0 0	30892	Bushy Heath -	102 9 0	34388
Hillingdon Steeple -	33 48 0		Hadley Steeple -	59 35 0	
Highgate Chapel -	67 50 0	17561	St. Alban's Spire -	1 49 34	57377
Harrow Spire -	24 13 0	39647	Bushy Heath - -	162 50 40	5443
Finchley Lodge, Direction Post - - -	87 57 0		Stanmore Station -	15 19 46	
Hillingdon Steeple -	110 50 0	5986	St. Alban's Spire -	43 33 45	48465
Harrow Spire -	9 30 0	33895	Stanmore Station -	65 26 50	36728
Uxbridge Steeple - -	59 40 0		Hadley Steeple -	70 59 25	
Hillingdon Steeple -	71 34 0	11245	Stanmore Station -	105 59 12	87699
Uxbridge Steeple -	77 10 0	10941	Kensworth - -	34 29 11	148898
Iver Steeple -	31 16 0		Highgate - - -	39 31 37	
Uxbridge Steeple -	36 23 0	6961	Stanmore Station -	42 11 22	5447
Hillingdon Steeple -	84 43 0	4156	Kensworth - -	2 12 58	91512
Cowley Steeple -	58 54 0		Bushy Heath -	135 35 40	
Hayes Steeple -	59 59 0	17968	Stanmore Station -	71 15 30	70591
Harrow Spire - -	39 31 0	24439	Kensworth -	41 16 7	101059
Harefield Steeple -	80 30 0		Bethamstead Gazebo	67 28 23	
Hanger Hill Tower -	66 14 0	8351	Acton Steeple -	70 29 0	22542
Hampstead Spire -	16 25 0	27042	Chiswick Steeple -	85 12 0	21288
Acton Steeple -	97 21 0		Paddington Chapel -	24 19 0	
Hanger Hill Tower -	59 45 0	7058	Acton Steeple -	29 26	12167
Acton Steeple -	51 44 0	7757	Chiswick Steeple -	102 14	6118
Ealing Steeple -	68 26		Hammersmith Steeple	48 20	
Acton Steeple -	98 31 0	9300	Highgate Chapel -	23 21 24	24061
Hampstead Spire -	17 56 0	29871	Argyle Street Observatory	97 54 0	9631
Chiswick Steeple -	63 33 0		St. Paul's - - -	58 44 36	
Harrow Spire - -	58 23	16029	Highgate Chapel -	46 59	15185
Hendon Steeple -	38 15	22050	St. Paul's - - -	39 1 0	17636
Great Stanmore Steeple -	83 21		Stoke Newington Steeple	94 0 0	
Harrow Spire -	76 2 30	13109	Highgate Chapel -	129 24 0	32131
Great Stanmore Steeple	44 40 30	18094	St. Paul's - - -	29 11 0	50919
Barn Hill House -	59 17 0		Enfield Windmill -	21 25 0	
Harrow Spire -	34 31	29120	Enfield Windmill -	109 1	3460
Great Stanmore Steeple	115 46	18322	Highgate Chapel -	5 37	33418
Sir J. Anderson's House	29 43		Enfield Steeple -	65 22	
Stanmore Station -	01 27 54	5433	Enfield Windmill -	40 38 0	8105
Hampstead Heath -	6 47 53	45070	Highgate Chapel -	11 29 0	26511
Bushy Heath - - -	71 44 13		White's Barn -	127 53 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distance in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Enfield Windmill -	11 54 0	24393	Stanmore Station -	46 0 40	16520
Highgate Chapel -	31 20 0	9673	St. Peter's Steeple -	17 35 0	39345
Hornsey Steeple -	136 46		Watford Spire -	116 24 20	
Enfield Windmill -	23 35	19716	Watford Spire -	111 26 30	17647
Hornsey Steeple -	51 17	10110	Stanmore Station -	35 34 0	25239
Tottenham Steeple -	105 8		Rickmansworth Spire -	32 59 30	
Hornsey Steeple -	22 18	18004	St. Peter's Steeple -	10 8 0	41229
Tottenham Steeple -	133 47	9463	Watford Spire -	99 49 0	7362
Edmonton Steeple -	23 55		Bushey Steeple -	70 3 0	
Hampstead Heath -	0 17 56	59114	St. Peter's Steeple -	32 27 0	
Highbeech -	42 5 4	460	Watford Spire -	78 16 0	22503
Highbeech new station	137 37 0		Elstree Steeple -	69 17 0	
Highbeech new station	33 5 52	53288	Watford Spire -	65 34 0	11875
Hampstead Heath -	63 27 5	32493	Bushey Steeple -	77 14 0	11085
Barnet Steeple -	83 27		Aldenham Steeple -	37 12 0	
Bushey Heath -	74 44	41722	St. Peter's Steeple -	36 26 30	25496
Hadley Steeple -	59 49 30	46559	Bushey Steeple -	36 10 0	25903
St. Alban's Spire -	45 26 28		Abbot's Langley Spire -	107 23 30	
St. Alban's Spire -	1 57 34	46950	Abbot's Langley Spire -	23 24 0	19165
Bushey Heath -	162 50 40	5442	Bushey Steeple -	43 19 30	11095
Stanmore Station -	15 11 46		Aldenham Steeple -	143 10 30	
Hadley Steeple -	70 10 10	38066	Bushey Steeple -	48 9 0	8237
St. Alban's Spire -	46 47 2	49135	Aldenham Steeple -	47 37 0	8307
Berkhampstead Gazebo	63 2 48		Sly Hill House -	84 14 0	
Stanmore Station -	34 43 42	70391	Hadley Steeple -	7 2 10	37576
Highbeech -	53 20 24	49988	Bushey Heath -	122 15 20	5443
Berkhampstead Gazebo	91 55 54		Stanmore Station -	50 42 30	
Hadley Steeple -	67 9 0	46851	Stanmore Station -	44 58 30	29088
Berkhampstead Gazebo	65 17 0	47529	Hadley Steeple -	50 24 53	20670
St. Peter's Steeple, St. Al- ban's	47 34 0		Hendon Steeple -	84 50 35	
Stanmore Station -	42 21 50	48981	Hendon Steeple -	0 3 0	16168
Berkhampstead Gazebo	43 58 50	47529	Hadley Steeple -	9 8 0	10735
St. Peter's Steeple -	93 39 20		Totteridge Spire -	104 49 0	
St. Peter's Steeple -	63 40 0	39331	Hadley Steeple -	32 48 0	7346
Hadley Steeple -	50 10 0	45903	Totteridge Spire -	41 1 0	6755
Watford Spire -	66 40 0		Poole's House -	106 11 0	
Stanmore Station -	70 20 44	17345	Hadley Steeple -	67 27 0	11080
St. Peter's Steeple -	2 31 14	66145	Totteridge Spire -	57 58 0	12115
Harrow Spire -	7 8 2		Belmont House -	54 55 0	



Names of Stations and inter- sected Objects.	Angles in Chain.		Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Hadley Steeple -	14 7 0	8212	Hadley Steeple	36 30 50	36688
Totteridge Spire -	41 27 0	3871	St. Peter's Steeple -	51 30 0	27895
Lee's Summer House -	120 20 0		Hatfield Steeple -	91 59 10	
Hadley Steeple -	109 18 0	3573	Hatfield Steeple -	13 17 0	24780
St. Peter's Steeple -	4 1 0	48150	St. Peter's Steeple -	62 41 30	14057
Barnet Steeple -	66 41 0		Hill End -	87 1 30	
St. Peter's Steeple -	58 46 30	41150	Hill End -	59 2 0	29618
Abbot's Langley Spire	83 15 0	35435	St. Peter's Steeple -	92 40 0	25424
Elstree Steeple -	37 58 30		North Mims Spire -	28 18 0	
St. Peter's Steeple -	28 21 0	31374	St. Peter's Steeple -	46 24 0	25492
Elstree Steeple -	47 43 0	20137	Harrow Spire -	20 49 6	51952
Ridge Steeple -	103 50 0		Abbot's Langley Spire	112 46 54	
St. Alban's Spire -	5 7 0	29625	St. Peter's Steeple -	86 7 0	25497
Berkhampstead Gazebo	7 40 0	19804	Barnet Steeple -	28 43 30	52938
Hatfield Steeple -	167 13 0		Abbot's Langley Spire	65 9 30	
Hatfield Steeple -	7 34 0	12785	Barnet Steeple -	64 58 55	42330
Berkhampstead Gazebo	13 17 0	7327	Abbot's Langley Spire	47 35 30	51951
Essendon Steeple -	159 9 0		Harrow Spire -	67 25 35	
St. Peter's Steeple -	21 55 0	41722	Barnet Steeple -	48 56 50	75634
Berkhampstead Gazebo	60 28 0	17898	Harrow Spire -	97 20 10	57507
North-haw Windmill	97 37 0		Cheneys Steeple	33 43 0	
St. Peter's Steeple -	56 33 0	42787	Barnet Steeple -	16 2 5	75653
Berkhampstead Gazebo	56 9 0	42985	Abbot's Langley Spire	133 24 55	28768
Codicote Steeple -	67 18 0		Cheneys Steeple -	30 33 0	
St. Peter's Steeple -	123 15 0	59667	Cheneys Steeple -	54 32 0	15972
Berkhampstead Gazebo	31 52 30	94494	Abbot's Langley Spire	33 44 0	23425
Caddington Steeple -	24 52 30		Bovington Lodge	31 44 0	
Hadley Steeple	36 45 0	62101	Abbot's Langley Spire	127 41 0	23453
Berkhampstead Gazebo	107 28 0	38953	St. Peter's Steeple -	24 59 0	43940
Neasdon Spire -	35 47 0		Bovington Lodge -	27 20 0	
Berkhampstead Gazebo	112 19 0	17902	Bovington Lodge -	15 56 0	19969
Neasdon Spire -	19 54 0	48656	Abbot's Langley Spire	51 33 0	7000
North-haw Windmill	47 47 0		Hythe Farm -	113 11 0	
St. Peter's Steeple -	10 43 30	39694	Hythe Farm -	65 17 0	6122
Caddington Steeple -	19 33 0	22025	Abbot's Langley Spire	51 24 0	7116
Flamstead Steeple -	149 43 30		King's Langley Steeple	63 19 0	
Caddington Steeple -	6 49 0	12595	King's Langley Steeple	116 51 0	18428
Flamstead Steeple -	8 55 30	9634	Abbot's Langley Spire	46 48 0	22554
Market Street Windmill	164 15 30		Hemel Hempstead Spire	16 21 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Bovington Lodge -	84 21	36202	Clay Hill Bush -	75 14	20918
St. Peter's Steeple -	41 44 17	54116	Henlow Steeple -	39 26	31845
Little Gaddesden Steeple	53 54 43		Baldock Telegraph	65 20	
Bovington Lodge -	23 59	26564	Clay Hill Bush	40 53 0	14090
Little Gaddesden Steeple	42 8 30	16092	Baldock Telegraph	35 27 0	12436
Gaddesden Place -	113 52 30		Wallington Barrow	103 40 0	
Lilleyhoe - -	57 21 58	16857	Clay Hill Bush	102 41 0	10277
Royston - -	11 20 19	72186	Baldock Telegraph	23 24 0	45244
Shillington Steeple -	111 17 33		Hinxworth Steeple	53 55 0	
Lilleyhoe - -	26 12 10	13801	Clay Hill Bush	12 50 0	17611
Shillington Steeple -	53 39 0	7566	Baldock Telegraph	46 17 0	5412
Higham Gobion Steeple	100 8 50		Baldock Spire -	120 53 0	
Lilleyhoe - -	39 43 17	56590	St. Neot's Steeple	13 15 37	51020
Royston - -	44 51 36	51269	Lilleyhoe -	11 56 6	56590
Biggleswade Spire -	95 25		Biggleswade Spire	154 48 17	
Shillington Steeple -	45 59	7342	St. Neot's Steeple	3 31 0	113121
Royston - -	4 30	67292	Lilleyhoe -	138 38 30	10501
Meppershall Steeple -	129 31 0		Galley Hill Bush	37 50 30	
Meppershall Steeple -	135 37 0	17083	Henlow Steeple	12 24 0	17256
Royston - -	8 38 0	80306	Baldock Telegraph	13 53 0	15443
Clophill Steeple - -	36 15 0		Stotfold Steeple	153 43 0	
Clophill Steeple - -	36 53	17022	Henlow Steeple	27 36 0	26575
Meppershall Steeple -	71 15	10789	Baldock Telegraph	56 2 0	14845
Shefford Steeple -	71 52 0		Hitchin Hill, Tree	96 22 0	
Biggleswade Spire	17 48	33069	Henlow Steeple	43 17	31716
Royston - -	27 4 0	22216	Baldock Telegraph	68 4	23442
Clay Hill Bush	135 8 0		Hitchin Windmill	68 39	
Clay Hill Bush -	70 30 0	18333	Henlow Steeple	46 44	29405
Royston - -	47 2 0	23617	Baldock Telegraph	61 22	24390
Gilden Morden Steeple	62 28 0		Ashwell Spire -	71 54	
Clay Hill Bush -	13 52	20906	Henlow Steeple	15 38	31709
Royston - -	31 56	36145	Hitchin Hill, Tree	114 55	9425
Baldock Telegraph	34 12 0		Hitchin Windmill	49 27	
Clay Hill Bush -	36 46 0	18929	Henlow Steeple	37 38	40056
Royston - -	58 6 0	13346	Hitchin Hill, Tree	101 53	24994
Lillington Steeple -	85 8 0		Great Offley Steeple	40 29 0	
Biggleswade Spire -	63 23	19463	Henlow Steeple -	12 36 0	38744
Clay Hill Bush -	39 33 0	29927	Hitchin Hill, Tree	143 3 0	14060
Henlow Steeple -	81 4 0		Ippolett's Steeple	24 21 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distance in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Henlow Steeple	20 35 0	45830	Biggleswade Spire	152 50 0	15354
Hitchin Hill Tree	135 23 0	22940	Henlow Steeple	11 57 0	33856
Warden Lodge	24 2 0		Sandon Spire	15 13 0	
Hitchin Windmill	77 1 0	19451	Biggleswade Spire	51 3 0	15864
Hitchin Hill Tree	75 4 0	19616	Henlow Steeple	52 26 0	15565
Stevenage Spire	27 55 0		South-Hill Steeple	76 31 0	
Henlow Steeple	63 30 0	16466	North-Hill Steeple	111 14 0	15022
Hitchin Windmill	31 8 0	28501	Biggleswade Spire	35 17 0	24241
Meppershall Steeple	85 22 0		Blunham Steeple	33 29 0	
Henlow Steeple	21 57	40032	Blunham Steeple	63 55 0	16486
Hitchin Windmill	109 48	15904	Biggleswade Spire	41 4 0	22539
Great Offley Steeple	48 15		Everton Steeple	75 1 0	
Henlow Steeple	21 51	30579	Blunham Steeple	17 24	9584
Hitchin Windmill	73 33	11866	Biggleswade Spire	10 45	15366
Willien Steeple	84 36		Sandon Spire	151 51	
Clay Hill Bush	124 15 0	38725	Blunham Steeple	41 46 0	22900
Wallington Barrow	41 44 0	48087	Biggleswade Spire	64 51 0	16851
Abingdon Steeple	14 1 0		Warden Steeple	73 23	
Hitchin Windmill	20	34406	Biggleswade Spire	75 36	16837
Stevenage Spire	137	17348	Sandon Spire	55 35	19768
Knebworth Steeple	22 52 0		Warden Steeple	48 49	
Knebworth Steeple	104 28	13388	Henlow Steeple	65 20	38768
Stevenage Spire	32 4 0	24418	Clay Hill Bush	68 41	37818
Datchworth Spire	43 28 0		Potton Steeple	45 59	
Datchworth Spire	91 17 0	36374	Potton Steeple	73 58	9059
Knebworth Steeple	68 40	39041	Clay Hill Bush	13 51	36373
Cottered Spire	20		Cockayne Hatley Steeple	92 11 0	
Datchworth Spire	63 51	16919	Shillington Steeple	17 47 0	25231
Knebworth Steeple	68 40 0	16204	Lilleyhoe	32 55 50	10525
Weston Steeple	47 29 0		Galley Hill Bush	29 17 10	
Henlow Steeple	6 29	8984	Tuddenham Steeple	13 15 52	27766
Biggleswade Spire	5 30	10584	Lilleyhoe	37 15 26	10525
Longford Steeple	168 1		Galley Hill Bush	29 28 42	
Biggleswade Spire	12 48 0	19010	Galley Hill Bush	23 3 0	9155
Henlow Steeple	77 37 0	4312	Tuddenham Steeple	10 30 0	19670
Clifton Steeple	89 35 0		Stretley Steeple	46 27 0	
Biggleswade Spire	106 49	14348	Lidlington	45 51 0	30192
Henlow Steeple	30 11 0	37317	Lilleyhoe	37 43 58	35398
North-Hill Steeple	43 0		Tuddenham Steeple	96 25 2	

Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.
Galley Hill Bush - -	49 5 30	28618	Kensworth - -	40 48 36	62458
Tuddenham Steeple -	67 21 0	23436	Lilleyhoe - -	89 59 30	40817
Dunstable Steeple -	63 33 30		Amphill Steeple -	49 11 54	
Stretley Steeple -	111 53 0	25621	Bowbrickhill - -	27 21 44	22297
Tuddenham Steeple -	39 8 0	37670	Kensworth - -	15 8 36	39229
Luton Steeple - -	28 59 0		Milton Bryant Steeple -	137 29 40	
Galley Hill Bush -	29 39 0	8804	Lilleyhoe - -	6 43 47	48649
Stretley Steeple -	70 57 0	4608	Bowbrickhill - -	14 48 55	22296
Barton Windmill -	79 24 0		Milton Bryant Steeple -	158 27 18	

ART. XI. *Secondary Triangles for the Survey of Part of Surrey and Part of Berkshire. Plate 11.*

The Distances used as Base Lines in the following Triangles are

Hind Head to { Norris's Obelisk - 82191 feet  
Highclere Beacon - 160972.2

Hind Head - -	25 20 0	58047	Cæsar's Camp -	82 9 10	50338
Norris's Obelisk -	30 58 57	42264	Finchampstead Steeple	71 7 0	52703
Farnham Beacon -	123 41 3		Bowsey Hill - -	26 43 50	
Hind Head - -	34 6 17	50847	Cæsar's Camp -	66 49 50	88686
Highclere - -	13 29 14	122242	Finchampstead Steeple	97 39 30	82265
Farnham Beacon -	132 24 29		Nettlebed Windmill -	15 50 40	
Farnham Beacon - -	37 44 34	48488	Cæsar's Camp -	63 53 34	51469
Norris's Obelisk -	82 28 36	29938	Rowsey Hill - -	59 4 30	53877
Finchampstead Steeple	59 46 50		Windsor Castle -	57 1 56	
Bagshot Heath -	103 23 30	9470	Cæsar's Camp -	79 13 34	51456
Norris's Obelisk - -	35 8 38	16004	Nettlebed Windmill -	32 35 30	93844
Cæsar's Camp -	41 27 5		Windsor Castle -	68 10 56	
Norris's Obelisk - -	52 42 9	29959	Cæsar's Camp -	47 51 15	70635
Cæsar's Camp - -	95 9 21	23929	Nettlebed Windmill -	51 44 57	66689
Finchampstead Steeple	32 8 30		Tower on Lord Boston's Estate at Hedsor -	80 23 48	
Hind Head - -	43 13 17	97996	Finchampstead Steeple	47 26 36	83458
Highclere - -	36 50 41	111915	Nettlebed Windmill -	67 13 2	66678
Finchampstead Steeple	99 56 2		Lord Boston's Tower -	65 20 22	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Cæsar's Camp - -	47 37 31	19295	Finchampstead Steeple	29 37 2	53765
Finchampstead Steeple	52 32 9	17959	Norris's Obelisk -	122 17 31	31431
Wokingham Steeple -	79 50 20		Station near Ash -	28 5 27	
Cæsar's Camp -	40 1 20	54881	Norris's Obelisk -	79 52 41	31447
Bowsey Hill - -	76 45 4	36258	Barrow on Hartford Bridge		
St. Lawrence Steeple in			Flats - -	67 55 6	33407
Reading - -	63 13 36		Station near Ash -	32 12 13	
Bowsey Hill -	59 10 24	36131	Finchampstead Steeple -	11 18 54	76261
St. Lawrence Steeple -	60 14 9	35742	Nettlebed Windmill	63 25 8	16731
Wokingham Steeple -	60 35 27		Fawley Steeple -	105 15 58	
Farnham Beacon -	9 23 54	63935	Wokingham Steeple	12 26 12	62159
Finchampstead Steeple	114 25 19	17947	Nettlebed Windmill -	53 3 8	16750
Wokingham Steeple -	26 10 47		Fawley Steeple -	114 30 40	
Wokingham Steeple -	52 37 50	54978	Finchampstead Steeple	105 4 47	46584
Finchampstead Steeple	109 25 36	46332	Cæsar's Camp -	51 17 24	57643
Mortimer Windmill -	17 56 34		Caversham Park -	23 37 49	
Finchampton Steeple -	36 20 0	20586	Finchampstead Steeple -	52 32 40	46540
Norris's Obelisk -	42 24 20	18086	Wokingham Steeple -	105 39 0	38357
Barrow on Hartford Bridge			Caversham Park -	21 48 20	
Flats - -	101 15 40		Cæsar's Camp -	10 4 26	41451
Finchampstead Steeple	23 26 50	20559	Bowsey Hill - -	37 14 36	11978
Farnham Beacon -	15 26 10	30735	Ruscombe Steeple -	132 40 58	
Barrow - - -	141 7 0		Finchampstead Steeple	9 25 0	48208
Finchampstead Steeple -	33 39 39	45643	Bowsey Hill -	56 48 19	9424
Farnham Beacon -	67 27 46	26391	Wargrave Steeple -	113 46 41	
Odiham Steeple -	78 52 35		Wokingham Steeple -	14 53 59	33418
Finchampstead Steeple	55 41 0	39103	Bowsey Hill - -	65 56 35	9408
Farnham Beacon -	50 41 30	41742	Wargrave Steeple -	99 9 26	
Tilney Hall - -	73 37 30		Cæsar's Camp - -	92 31 19	38748
Finchampstead Steeple -	29 1 57	27301	Finchampstead Steeple	56 29 14	46428
Farnham Beacon -	28 17 35	27956	Shottersbrook Spire -	30 59 27	
Hartley Wintney Steeple	122 40 28		Finchampstead Steeple -	131 46 55	25170
Farnham Beacon -	43 43 45	27982	Cæsar's Camp -	24 45 26	44819
Barrow on Hartford Bridge			Shinfield Steeple -	23 27 39	
Flats -	61 28 8	22015	Finchampstead Steepl	85 40 40	62508
Hartley Wintney Steeple	74 48 7		Cæsar's Camp -	72 51 55	65225
Finchampstead Steeple	52 28 24	27309	Henley Steeple -	21 27 29	
Barrow, Hartford Bridge	79 39 42	22016	Cæsar's Camp -	25 14 50	65207
Flats -			Wokingham Steeple -	144 58 30	48460
Hartley Wintney Steeple	47 51 54		Henley Steeple -	9 46 40	

Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.
Bowsey Hill -	18 0 0	27987	Finchampstead Steeple	45 22 20	34137
Nettlebed Windmill -	28 42 44	17944	Farnham Beacon -	44 43 28	34509
Rotherfield Greys Steeple	133 17 16		Frimley Chapel -	89 54 12	
Finchampstead Steeple -	48 28 10	82000	Tilney Hall - -	34 32 0	27506
Nettlebed Windmill -	65 33 35	67427	Rooks Down - -	55 21 0	18954
Hedsor House -	65 58 15		Hackwood House -	90 7 0	
Cæsar's Camp -	25 16 0	33368	Tilney Hall - -	42 0 0	11738
Bowsey Hill -	35 14 12	24686	Rooks Down -	17 39 0	25926
Windmill on White Waltham Common -	119 29 48		Basingstoke Town House	120 21 0	
Finchampstead Steeple	22 50 0	30073	Tilney Hall - -	61 46 40	15963
Wokingham Steeple -	129 55 0	15215	Rooks Down - -	28 31 0	29461
Hurst Steeple -	27 15 0		Farm near Five Lanes End	89 42 20	
Cæsar's Camp -	116 59 54	22643	Rooks Down - -	24 53 30	19288
Finchampstead Steeple	30 31 52	39714	Basingstoke Town House	125 18 0	9917
Warfield Steeple -	32 28 14		Basing Steeple -	29 48 30	
Cæsar's Camp -	106 24 34	22657	Rooks Down - -	46 52 0	20489
Bagshot Heath -	53 51 46	26912	Tilney Hall - -	37 35 0	24515
Warfield Steeple -	19 43 40		Bramley Steeple -	95 33 0	
Finchampstead Steeple -	30 48 0	12495	Finchampstead Steeple	135 28 20	68785
Norris's Obelisk -	18 25 0	20252	Farnham Beacon -	26 19 0	108803
Yately Steeple -	130 47 0		Dr. Breendon's Tower -	18 12 40	
Farnham Beacon -	21 3 20	42806	Finchampstead Steeple	61 30 24	68757
Odiham Steeple -	129 13 0	19845	Bowsey Hill - -	71 46 16	63621
Rotherwick Steeple -	29 43 40		Dr. Breendon's Tower	46 43 20	
Barrow on Hartford Bridge Flats -	14 23 50	34963	Hind Head - -	20 41 50	147372
Farnham Beacon -	109 48 0	9238	Highclere - -	66 4 20	50983
Crondall Steeple -	55 48 10		Beenham Steeple -	93 13 50	
Barrow on Hartford Bridge Flats -	16 32 22	46566	Highclere - -	9 56 38	80169
Station near Ash -	30 54 18	14469	Dr. Breendon's Tower -	86 50 22	13855
The 34 mile stone on the Farnham Road -	122 33 20		Nunhide Pigeon House	83 13 0	
Barrow on Hartford Bridge Flats -	4 39 46	34316	Farnham Beacon -	37 0 50	49075
Station near Ash -	105 55 3	2901	Odiham Steeple - -	111 45 30	31806
Ash Steeple -	69 25 11		Hilfield Park -	34 13 40	

ART. XII. *Secondary Triangles for the Survey of Part of South Wales.*  
*Plate XII.*

The Distances serving as Base Lines for the following Triangles, will be found by referring to the 158th and three succeeding pages of the present volume.

Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.
Precelly Top - -	53 1 30	49938	Brenin Fawr - -	76 10 30	15469
Brenin Fawr - -	79 0 30	40641	Barrow near Panssyon -	22 7 0	39898
Barrow near Panssyon -	47 58 0		Foel Dregarn - -	81 32 30	
Precelly Top - -	37 2 30	64712	Precelly Top - -	51 1 30	22289
Brenin Fawr - -	109 35 0	41376	Barrow near Panssyon -	25 49 30	39881
Warren Bank, highest point - -	33 22 30		Foel Dregarn - -	103 9 0	
Precelly Top - -	45 8 0	67142	Precelly Top - -	70 30 45	58302
Brenin Fawr - -	101 23 0	48542	Nipple Rock - -	75 5 15	56878
Ferwig Steeple - -	33 29 0		Rock near Trecoon Farm	34 24 0	
Precelly Top - -	56 55 15	58266	Brenin Fawr - -	10 54 0	56352
Brenin Fawr - -	83 0 45	49187	Rock near Trecoon Farm	119 59 0	12302
Rock near Trecoon Farm	40 4 0		Cardigan Island - -	49 7 0	
Brenin Fawr - -	30 35 0	41375	Rock near Trecoon Farm	22 46 0	22125
Barrow near Panssyon -	76 35 0	21642	Cardigan Island - -	133 24 30	11786
Warren Bank - -	72 50 0		Hill near Mount Church	23 49 30	
Brenin Fawr - -	22 23 0	48566	Warren Bank - -	76 24 0	26426
Barrow near Panssyon -	102 59 30	18980	Barrow near Panssyon -	59 0 30	29962
Ferwig Steeple - -	54 37 30		Llanfihangel Penbedw -	44 35 30	
Brenin Fawr - -	14 53 0	56401	Brenin Fawr - -	11 54 30	37231
Barrow near Panssyon -	133 45 0	20055	Warren Bank - -	57 13 30	9137
Cardigan Island, highest Point - -	31 22 0		Cardigan Steeple - -	110 52 0	
Brenin Fawr - -	36 52 30	15067	Brenin Fawr - -	20 27 0	27018
Barrow near Panssyon -	17 33 0	29984	Rock near Trecoon Farm	21 34 30	25672
Llanfihangel Penbedw Steeple - -	125 34 30		Cilgerran Castle - -	137 58 30	
Brenin Fawr - -	71 38 0	45933	Warren Bank - -	85 40 0	14714
Barrow near Panssyon -	59 1 30	50844	Rock near Trecoon Farm	24 55 0	25632
Foelary Barrow - -	49 20 30		Cilgerran Castle - -	59 25 0	
Brenin Fawr - -	50 37 0	46717	Warren Bank - -	24 12 0	22181
Barrow near Panssyon -	73 3 30	37746	Barrow near Panssyon -	81 11 0	9201
Carnyngly Rock - -	56 19 30		Rock near Trecoon Farm	74 37 0	
			Precelly Top - -	54 59 30	22328
			Rock near Trecoon Farm	21 55 0	48997
			Foel Dregarn - -	103 5 30	

Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.
Precelly Top - -	21 3 0	25330	Precelly Top - -	58 39 30	51418
Foel Dregarn - -	98 12 0	9192	Nipple Rock - -	80 30 30	44525
Crigidwy - -	60 45 0		Trefgarn Rock - -	40 50 0	
Brenin Fawr - -	33 44 0	16125	Precelly Top - -	23 6 15	51449
Foel Dregarn - -	77 3 0	9188	St. Thomas Steeple - -	42 40 0	29788
Crigidwy - -	69 13 0		Trefgarn Rock - -	114 13 45	
Brenin Fawr - -	75 38 0	45911	Precelly Top - -	57 5 45	132928
Rock near Trecoon Farm	49 38 30	58366	Highgate Mountain - -	71 2 10	118011
Foelary Barrow - -	54 43 30		Ramsey Island, highest point - -	51 52 5	
Precelly Top - -	85 57 0	9752	Precelly Top - -	62 59 0	117223
Rock near Trecoon Farm	9 35 0	58429	Highgate Mountain - -	61 14 30	119124
Foelary Barrow - -	84 28 0		Llaeithy Rock - -	55 46 30	
Precelly Top - -	127 27 11	34055	Plumstone Down - -	69 51 39	57701
Brenin Fawr - -	24 48 19	64440	Pencarn - -	59 30 36	62867
Nipple Rock - -	27 44 30		Llaeithy Rock - -	50 37 45	
Nipple Rock - -	63 53 32	37148	St. Ann's Hill - -	6 56 48	83404
Plumstone Down - -	40 9 31	51725	Llaeithy Rock - -	95 46 1	10139
Pencarn, highest point	75 56 57		Penberry Rock - -	77 17 11	
Nipple Rock - -	77 27 0	13972	Llaeithy Rock - -	85 7 30	9530
Pencarn - -	21 47 30	36737	Penberry Rock - -	45 30 30	13311
Dinas Head, highest point	80 45 30		St. David's Cathedral - -	49 22 0	
Nipple Rock - -	98 20 0	13970	Pencarn - -	8 24 0	64670
Brenin Fawr - -	11 44 45	67887	Llaeithy Rock - -	96 42 0	9512
Dinas Head - -	69 55 15		St. David's Cathedral - -	74 54 0	
Nipple Rock - -	40 42 0	20857	Pencarn - -	17 19 0	81862
Dinas Head - -	97 42 45	13725	St. David's Cathedral - -	118 57 15	27847
Sunken Rock near Pendroway Head	41 35 15		Highest point of the Northmost of the Bishop and his Clerks - -	43 43 45	
Nipple Rock - -	85 28 0	15974	Penberry Rock - -	61 39 15	31530
Dinas Head - -	51 24 30	20374	St. David's Cathedral - -	93 25 15	27799
Eastmost Chimney of Mr Mathias's House at Fishguard - -	43 7 30		Bishop and his Clerks - -	24 55 30	
Nipple Rock - -	89 9 45	18055	Plumstone Down - -	46 21 54	36546
Dinas Head - -	52 47 30	22667	Pencarn - -	44 53 47	37474
Carnyngly Rock - -	38 2 45		Old Windmill - -	88 44 19	
Dinas Head - -	18 7 30	28309	Precelly Top - -	46 32 0	21994
Carnyngly Rock - -	115 41 41	9773	Nipple Rock - -	40 6 0	24782
Mr. Jones's Summer House	46 10 49		Castle Baith Mountain, Barrow - -	93 22 0	



Names of Stations and inter- sected Objects	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected objects.	Angles for Calculation	Distances in Feet.
Trefgarn Rock -	32 3 0	30781	Laeithy Rock -	40 11 40	62311
Nipple Rock -	40 26 0	24776	Plumstone Down -	75 53 45	41465
Castle Baith Mountain	107 31 0		Talbenny Church -	63 54 35	
Precelly Top -	21 28 30	27866	Roch Castle -	93 18 10	31922
Castle Baith Mountain -	111 6 10	10935	Laeithy Rock -	30 44 50	82333
A Flat Barrow -	47 25 20		Talbenny Church -	55 56 45	
Precelly Top -	25 5 20	27846	Precelly Top -	28 47 5	86337
Nipple Rock -	53 5 30	14767	Plumstone Down -	102 6 12	42518
Flat Barrow -	101 49 10		Johnston Steeple -	49 6 43	
Flat Barrow -	109 48 40	31286	Plumstone Down -	19 57 50	29613
Castle Baith Mountain	53 48 20	36473	Johnston Steeple -	34 32 55	17828
Precelly Forest House -	16 23 0		St. Thomas Steeple -	125 29 15	
Precelly Top -	11 58 0	82635	St. Thomas Steeple -	18 8 45	17834
Laeithy Rock -	25 12 20	40233	Johnston Steeple -	81 5 45	5625
Garn Rock -	142 49 40		Boulton Beacon -	80 45 30	
Precelly Top -	26 36 12	54358	Roch Castle -	30 58 0	34679
Nipple Rock -	137 4 45	82647	St. Thomas Steeple -	86 51 45	17871
Garn Rock -	16 18 43		Boulton Beacon -	62 10 15	
Plumstone Down -	66 40 15	51391	St. Ann's Hill -	112 5 30	16571
St. Thomas Steeple -	78 53 45	48090	Milford Steeple -	21 44 0	41467
Moat Steeple -	34 26 0		Green Mire Hill -	46 10 30	
Plumstone Down -	85 31 1	10786	St. Ann's Hill -	106 51 45	16534
St. Thomas Steeple -	20 29 47	30714	Hubberstone Steeple -	26 33 5	35398
Roch Castle -	73 59 22		Green Mire Hill -	46 35 10	
Roch Castle -	33 53 10	26276	St. Ann's Hill -	124 13 10	4318
St. Thomas Steeple -	58 46 30	17132	Green Mire Hill -	10 39 14	19314
Rudbaxton Steeple -	88 20 20		St. Ann's Lighthouse -	45 7 36	
Plumstone Down -	33 11 47	19337	St. Ann's Hill -	31 49 30	30852
St. Thomas Steeple -	38 14 41	17104	Green Mire Hill -	120 42 10	18921
Rudbaxton Steeple -	108 33 52		High rock, near south ex- tremity of Scomer Island	27 28 20	
Plumstone Down -	51 47 21	10785	Green Mire Hill -	109 52 50	18860
Laeithy Rock -	9 25 43	51729	St. Ann's Lighthouse -	34 34 54	31248
Roch Castle -	118 46 56		Scomer Island -	35 32 16	
Laeithy Rock -	16 59 0	25998	Plumstone Down -	45 6 48	78249
Roch Castle -	15 47 0	27918	St. Ann's Hill -	75 25 24	57283
Scrabs Island, highest point -	147 14 0		St. Daniel's Spire -	59 27 48	
Laeithy Rock -	26 24 43	26005	Newton Down -	56 14 34	20428
Plumstone Down -	18 35 0	36299	Plumstone Down -	20 51 15	47509
Scrabs Island -	135 0 17		Lord Milford's Summer House -	102 54 11	

Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.
Precelly Top - - -	60 41 52	12883	Flimston Chapel - -	45 1 40	16783
Castle Baith Mountain -	35 36 20	19296	Sir H. Owen's S. House	77 56 50	12141
Maenclochog Steeple -	83 41 48		Lord Cawdor's Summer House with cupola -	57 1 30	
St. Ann's Hill - - -	35 19 22	26868	Sir H. Owen's S. House	17 38 40	12162
Sir H. Owen's Summer House - - -	28 49 11	32226	Bosheston Steeple -	64 1 20	4101
Hubberstone Steeple -	115 51 27		Summer House with cupola -	98 20 0	
St. Ann's Hill - - -	26 40 38	34631	Hubberstone Steeple -	72 52 32	16082
Sir H. Owen's Summer House - - -	38 59 1	24715	Green Mire Hill -	26 37 20	34299
Mr. Roch's Summer House	14 20 21		Old Windmill near Angle	80 30 8	
St. Ann's Hill - - -	93 44 2	4318	Sir H. Owen's S. House	29 30 30	30572
Sir H. Owen's Summer House - - -	4 52 58	50621	Hubberstone Steeple -	69 32 0	16073
St. Ann's Lighthouse -	81 23 0		Old Windmill - - -	80 57 30	
St. Ann's Hill - - -	5 27 10	53272	Newton Down - - -	37 52 1	44097
Sir H. Owen's S. House	119 35 36	5822	Marros Beacon - -	36 38 46	45349
Highgate Mountain -	54 57 14		Whitewell Old Windmill	105 29 13	
St. Ann's Hill - - -	8 7 18	43255	Newton Down - - -	64 55 39	44084
Sir H. Owen's S. House	50 3 6	8321	Highgate Mountain -	77 37 47	40879
Warren Spire - - -	121 49 36		Whitewell Old Windmill	37 26 34	
St. Ann's Hill - - -	1 46 34	56553	Highgate Mountain -	15 47 19	40931
Sir H. Owen's S. House	164 36 45	6606	Whitewell Old Windmill	82 22 1	11237
St. Petrox Steeple -	13 36 41		St. Florence Old Windmill	81 50 40	
Sir H. Owen's S. House	97 38 22	14418	Highgate Mountain -	23 7 39	34500
St. Petrox Steeple -	59 11 18	16638	St. Florence Old Windmill	56 7 30	16364
Flimston Chapel - -	23 10 20		Middle Hill Old Windmill	100 44 51	
Sir H. Owen's S. House	62 3 0	14376	St. Florence Old Windmill	25 42 0	16358
St. Ann's Lighthouse -	16 8 20	45684	Whitewell Old Windmill	116 17 0	7912
Flimston Chapel - -	101 48 40		Middle Hill Old Windmill	38 1 0	
Sir H. Owen's S. House	77 5 50	13391	Newton Down - - -	14 11 18	50604
Warren Spire - - -	67 47 10	14099	Whitewell Old Windmill	111 50 17	13363
Bosheston Steeple -	35 7 0		Old Windmill, Fire Beacon on its top - - -	53 58 25	
Sir H. Owen's S. House	69 16 0	13381	St. Florence Old Windmill	63 59 20	13676
Flimston Chapel - -	56 16 0	13973	Whitewell Old Windmill	66 54 50	13361
Bosheston Steeple - -	63 28 0		Old Windmill - - -	49 5 50	
Bosheston Steeple -	103 48 10	6786	St. Florence Old Windmill	23 55 52	6943
Flimston Chapel - -	22 54 40	17322	Whitewell Old Windmill	29 56 10	5043
Lord Cawdor's Summer House - - -	53 17 10		St. Florence Steeple -	126 7 48	

Names of Stations and inter- sected Objects.	Angles for Calculation	Distance in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation
St. Florence Old Windmill	98 45 1	6929	Precelly Top -	57 45 4
Newton Down -	10 12 1	38661	Plumstone Down -	54 54 47
St. Florence Steeple -	71 2 3		Newton Steeple -	67 20 9
St. Florence Old Windmill	107 11	10992	Precelly Top -	5 23 35
Old Windmill Fire Beacon	31 49 1	19917	Newton Steeple -	28 37 40
Jeffreston Steeple -	40 59 4		Robeston Wathen Steeple	145 58 45
St. Florence Old Windmill	66 8 34	10989	Precelly Top -	61 13 0
Newton Down -	17 9 28	34066	Trefgarn Rock -	58 38 0
Jeffreston Steeple -	96 41 58		Robeston Wathen Steeple	60 9 0
Jeffreston Steeple -	79 31	24431	Robeston Wathen Steeple	108 25 50
Old Windmill, Fire Beacon	57 13	28574	Newton Steeple -	27 38 40
Carew Beacon -	43 16		Old Castle -	43 55 30
Jeffreston Steeple -	38 32	24447	Precelly Top -	5 5
St. Florence Old Windmill	18 6 0	17265	Robeston Wathen Steeple	37 32 55
Carew Beacon -	23 22 0		Old Castle -	137 21 58
Jeffreston Steeple -	62 59 15	6685	Robeston Wathen Steeple	71 54
St. Florence Old Windmill	6 25 10	17454	Newton Steeple -	81 4 40
Loveston Steeple -	10 35 35		Wiston Steeple -	27 1 20
Highgate Mountain -	21 13 33	47342	Robeston Wathen Steeple	35 20 10
St. Florence Old Windmill	00 33 50	17436	Newton Steeple -	99 21 30
Loveston Steeple -	58 12 37		Old House -	45 18 20
St. Florence Old Windmill	39 34 20	30689	Precelly Top -	13 4 37
Highgate Mountain -	17 11 56	67303	Robeston Wathen Steeple	125 1 30
Ludchurch Steeple -	23 13 44		Minwear Steeple -	41 53 53
Highgate Mountain -	44 38 32	67334	Precelly Top -	8 13 30
Newton Down -	13 23 41	51552	Newton Down -	21 55 12
Ludchurch Steeple -	21 57 47		Minwear Steeple -	149 51 18
Highgate Mountain -	13 27 48	67317	Precelly Top -	43 40
Martos Beacon -	43 51 37	22619	Maculochog Steeple	83 4 0
Ludchurch Steeple -	22 40 45		Langblman Church -	53 16
St. Florence Old Windmill	33 56 10	16632	Precelly Top -	80 11 40
Jeffreston Steeple -	06 49 45	9700	Roch Castle -	23 30 58
Begeley Steeple -	39 14 35		Llandissilio Church -	76 17 22
St. Florence Old Windmill	140 55 10	16639	Precelly Top -	92 10 15
Highgate Mountain -	11 1 22	54863	Castle Baith Mountain	53 49 8
Begeley Steeple -	28 3 28		Llandissilio Church -	34 0 37
Precelly Top -	53 18 0	116617	New Inn Hill -	53 24 5
Lanton -	46 45 50	128338	Capel Kynon -	83 13 53
Wool House, Cady Island	79 56 8		Brean Fawr -	43 22 2

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Precelly Top - -	14 9 30	37785	Quarry Pile - -	93 36 15	9692
Capel Kynon - -	7 14 55	73256	Moelfre Barrow - -	11 58 48	46600
Brenin Fawr - -	158 35 35		Blaenporth Church - -	74 24 57	
Talsarn - -	40 7 7	138225	Quarry Pile - -	140 35 45	9674
New Inn Hill - -	100 32 45	90599	Pile on the Moor - -	10 59 48	32193
Brenin Fawr - -	39 20 8		Blaenporth Church - -	28 24 27	
Brenin Fawr - -	110 27 0	40616	Quarry Pile - -	47 0 10	24126
Rock near Trecoon Farm	30 59 0	73926	Moelfre Barrow - -	31 50 17	33450
Moelfre Barrow - -	38 34 0		Pile on the Moor - -	101 9 33	
Capel Kynon - -	40 7 53	26729	Capel Kynon - -	26 59 16	52158
Brenin Fawr - -	18 3 57	55555	Moelfre Barrow - -	90 40 45	23671
Pile on a Stone Quarry near Bettws Einon	121 4 10		Middle of Three Barrows on Newcastle Mountain	62 19 30	
Brenin Fawr - -	52 53 42	40605	Pile on the Moor - -	34 15 50	41963
Quarry Pile - -	46 11 48	44872	Moelfre Barrow - -	92 57 58	23652
Moelfre Barrow - -	80 54 30		Middle Barrow - -	52 46 12	
Brenin Fawr - -	34 52 8	40571	Pile on the Moor - -	19 27 25	31378
Capel Kynon - -	30 7 52	46205	Moelfre Barrow - -	69 42 17	11144
Moelfre Barrow - -	115 0 0		Penboir Church - -	90 50 18	
Capel Kynon - -	105 53 56	23476	Capel Kynon - -	13 49 7	43156
Brenin Fawr - -	15 49 12	82820	Moelfre Barrow - -	67 25 40	11163
Pile on Llandissilio Head	58 16 52		Penboir Church - -	98 45 13	
Capel Kynon - -	65 45 36	23519	Moelfre Barrow - -	81 51 0	6820
Quarry Pile - -	51 28 30	27411	Middle Barrow - -	16 34 0	23677
Llandissilio Head - -	62 45 54		Crug-moch - -	81 35 0	
Quarry Pile - -	75 37 40	26735	Moelfre Barrow - -	172 28 0	6811
Moelfre Barrow - -	34 6 40	46180	Brenin Fawr - -	9 34 0	39088
Capel Kynon - -	70 15 40		Crug-moch - -	97 58 0	
Moelfre Barrow - -	31 17 33	38865	Crug-moch - -	75 50 10	9818
Capel Kynon - -	57 15 0	24002	Brenin Fawr - -	14 32 50	37901
Bettws Einon - -	91 37 27		Crug-wan - -	89 37 0	
Capel Kynon - -	13 0 15	24008	Middle Barrow - -	19 59 30	27834
Quarry Pile - -	58 16 33	6331	Crug-moch - -	104 36 30	9834
Bettws Einon - -	108 43 12		Crug-wan - -	55 24 0	
Capel Kynon - -	64 20 0	12825	Crug-moch - -	21 9 27	35632
Quarry Pile - -	28 37 30	24127	Brenin Fawr - -	65 30 48	14132
Pile on the Moor right of the road to Capel Kynon	87 2 30		Kilwendague House, centre Pediment - -	93 19 45	
Capel Kynon - -	51 26 0	12818	Brenin Fawr - -	5 48 48	14132
Bettws Einon - -	32 2 0	18869	Moelfre Barrow - -	19 42 37	34711
Pile on the Moor - -	96 38 0		Kilwendague - -	104 20 35	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Brenin Fawr - -	47 10 37	17669	Capel Kynon - -	34 14 0	27561
Crug-moch - -	25 34 32	30020	Pen Voel Hadog - -	74 49 0	16054
Chimney in the centre of Finone House - -	107 14 51		Pen Coed Voel - -	70 57 0	
Brenin Fawr - -	44 39 27	7527	New Inn Hill - -	47 4 22	89253
Finone - -	23 14 48	13403	Capel Kynon - -	88 22 0	65381
Brenin Fach - -	112 5 45		Talsarn Barrow - -	44 33 38	
Brenin Fawr - -	128 30 6	7519	New Inn Hill - -	76 28 48	27044
Craig y dwy - -	15 47 35	21622	Capel Kynon - -	25 1 27	62103
Brenin Fach - -	35 42 19		Crug-edrid - -	78 29 45	
Brenin Fawr - -	18 10 13	56392	Capel Kynon - -	63 22 30	62198
Quarry Pile - -	83 35 30	17696	Talsarn Barrow - -	55 59 53	67070
Alderbrook Hall, centre Pediment - -	78 14 17		Crug-edrid - -	60 37 37	
Brenin Fawr - -	41 46 22	7530	New Inn Hill - -	65 32 40	14003
Alderbrook Hall - -	5 38 31	51021	Capel Kynon - -	12 38 13	58265
Brenin Fach - -	132 35 7		Crug-gair - -	101 49 7	
Brenin Fawr - -	51 31 30	33635	Capel Kynon - -	12 21 31	58266
Crug-moch - -	55 24 22	31968	Crug-edrid - -	67 7 22	13535
Llanwinio Church - -	73 4 8		Crug-gair - -	100 31 7	
Brenin Fawr - -	36 59 7	33617	Capel Kynon - -	46 22 45	74139
Crug-wan - -	61 21 15	23045	Talsarn Barrow - -	75 9 0	55525
Llanwinio Church - -	81 39 38		Shepherd's Pen - -	58 28 30	
Brenin Fawr - -	74 30 0	16113	Talsarn Barrow - -	13 21 38	56028
Llanwinio Church - -	27 54 23	33174	Crug-edrid - -	45 52 19	18037
Craig y dwy - -	77 37 37		Largest Carn on the sum- mit of Rhed y bont Mountain - -	120 46 3	
Crug-moch - -	44 39 50	13674	Talsarn Barrow - -	5 47 29	56014
Crug-wan - -	89 24 0	9613	Shepherd's Pen - -	92 3 32	5656
Post Gwyn Direction-post	45 56 10		Rhed y bont Mountain	82 9 0	
Capel Kynon - -	65 18 30	26991	Capel Kynon - -	39 59 30	44449
Middle Barrow - -	30 57 30	47674	Shepherd's Pen - -	35 28 30	49227
Pen Voel Hadog - -	83 44 0		Pen y Voel Dyhewydd	104 32 0	
Capel Kynon - -	98 13 17	12853	Talsarn Barrow - -	62 6 46	21777
Pen Voel Hadog - -	23 45 45	31496	Shepherd's Pen - -	23 0 7	49257
Pile on the Moor - -	58 0 50		Pen y Voel Dyhewydd	94 53 7	
Capel Kynon - -	31 4 0	27514	Pen y Voel Dyhewydd	111 46 0	39474
Middle Barrow - -	26 29 21	37827	Talsarn Barrow - -	45 11 32	51672
Intrenchment on Pen Coed Voel - -	122 25 23		Centre Pediment of a House - -	23 2 28	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Talsarn Barrow - -	42 47 14	18285	Lannon - - -	42 19 27	62600
House, Centre Pediment	17 59 1	40221	Wool House - -	27 11 37	92233
Moelfre Hill - - -	119 13 45		Llangynog Mountain	110 28 56	
Pen y Voel Dyherwydd	99 20 45	3629	Llannon - - -	81 24 52	62588
House, Centre Pediment	5 6 23	40220	Worm's Head - -	41 31 8	93362
Moelfre Hill - -	75 33 52		Llangynog Mountain	57 4 0	
Pen y Voel Dyherwydd	81 49 0	5048	New Inn Hill - -	48 30 47	73271
Moelfre Hill - -	59 40 3	5783	Precelly Top - -	35 10 13	95490
Dyherwydd Belfry - -	38 24 30		Llangynog Mountain	96 19 0	
Rhyd y bont Mountain	57 55 52	27944	Llangynog Mountain	42 56 41	42777
Crug-edrid - - -	82 18 0	23894	Precelly Top - -	24 29 28	70302
Llanwenog Church -	39 46 0		Station in a hedge near the five mile stone from St. Clare - - -	112 33 51	
Rhyd y bont Mountain	144 59 52	5668	Marros Beacon - -	48 5 15	17805
Llanwenog Church -	5 41 53	32750	Tenby Spire - -	10 54 41	49722
Shepherd's Pen - -	29 18 15		Station in Hedge - -	21 0 4	
Rhyd y bont Mountain	31 32 4	34216	Precelly Top - -	8 34 0	70302
Crug-edrid - - -	121 52 11	21072	Marros Beacon - -	35 56 30	17841
Llanfyny Church Tower	26 35 45		Station in a Hedge -	135 29 30	
Rhyd y bont Mountain	22 28 26	9739	Precelly Top - -	8 27 15	10630
Shepherd's Pen - -	131 48 48	4995	Station in Hedge - -	68 2 0	67034
Chimney of Cottage on a Hill - - -	25 42 46		West Chimney of Tavern- spite Inn - - -	103 30 45	
Crug-edrid - - -	102 41 52	23892	Marros Beacon - -	35 30 22	16918
New Inn Hill - - -	35 49 8	39829	Station in Hedge - -	67 28 0	10638
Llanwenog Church Tower	41 29 0		Tavernspite Inn - -	77 1 38	
Crug-edrid - - -	39 33 41	21069	Llangynog Mountain -	22 7 33	15257
Llanwenog Church Tower	60 18 58	15440	Station in Hedge - -	11 27 33	28925
Llanfyny Church Tower	86 7 21		Llanfihangel Abercowyn Church - - -	146 24 54	
Llanwenog Church Tower	108 54 58	13619	Llangynog Mountain -	99 16 45	30924
Llanfyny Church Tower	34 58 1	2074	New Inn Hill - -	21 18 18	84000
Pencarreg Belfry -	38 6 8		Barrow on Llansaint Hill	59 24 57	
Llanwenog Church Tower	46 23 6	2169	Llangynog Mountain -	22 55 52	30887
Llanfyny Church Tower	31 5 21	1450	Lannon Station - -	19 24 46	36208
Highroad House, eastmost Chimney - - -	102 31 53		Barrow on Llansaint Hill	137 39 22	
Lannon - - -	57 30 45	42622	Llangynog Mountain -	87 33 15	30910
New Inn Hill - - -	40 8 11	73263	Wool House, Cally Isle	18 45 42	96016
Barrow on Llangynog Mountain - - -	76 21 8		Barrow on Llansaint Hill	73 41 3	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Llangynog Mountain	33 11 30	19137	Llansaint Hill - -	103 34 33	28897
Llansaint Hill - -	35 8 33	18201	Llangynog Mountain -	36 42 12	47000
Llanstephan Castle, high square Turret -	111 39 57		Mancha Hill - -	39 43 15	
Llansaint Hill -	51 43 0	22745	New Inn Hill -	15 21 53	48475
Lannon Station -	38 54 53	28423	Llangynog Mountain	25 49 37	37482
Penbree Hill - -	89 22 7		Barrow on the high land between Abernant and Cyn Wyl Elvet -	138 48 30	
Llangynog Mountain -	26 53 19	53465	Llangynog Mountain	88 24 10	29435
Lannon Station -	58 20 26	28407	Mancha Hill - -	32 30 13	54756
Penbree Hill - -	94 46 15		Barrow between Abernant and Cyn Wyl Elvet -	59 5 37	
Lannon Station -	27 15 20	28384	New Inn Hill - -	29 22 13	39461
Kidwelly Spire -	52 7 3	16470	Barrow near Cyn Wyl	53 57 7	23937
Penbree Hill - -	100 37 37		Barrow at the entrance of the Moor, and close to the Road from Caermar- then to Newcastle in Emlyn - -	96 40 40	
Lannon Station -	78 36 41	37436	New Inn Hill -	44 44 6	39464
Llangynog Mountain -	33 37 0	66288	Llangynog Mountain -	31 32 47	53089
Nelson's Tower -	67 46 19		Moor-Barrow -	103 43 7	
Lannon Station -	98 2 45	37432	Llansaint Hill -	15 26 18	23357
Llansaint Hill -	41 48 15	55600	Mancha Hill - -	44 12 0	8918
Nelson's Tower -	40 9 0		Llangendeirne Church -	120 21 42	
Llangynog Mountain -	60 30 18	66316	Llangendeirne Church	44 13 48	17675
Penbree Hill - -	70 9 52	61375	Mancha Hill -	106 54 26	12887
Nelson's Tower -	49 19 50		Llandarrog Church -	28 51 46	
Marros Beacon -	127 47 30	17825	Llansaint Hill - -	8 47 55	40650
Worms Head - -	8 1 23	100925	Mancha Hill -	151 6 7	12867
Station in Hedge -	44 11 7		Llandarrog Church -	20 5 58	
Worms Head - -	14 29 51	82371	Crug-edrid - -	26 34 33	38706
Station in Hedge -	44 14 9	29559	New Inn Hill -	111 35 47	18142
Laugharne Church Tower	121 16 0		Brechva Mountain, highest Point - -	41 49 40	
Llansaint Hill -	99 33 7	7471	New Inn Hill -	78 56 26	18137
Penbree Hill - -	17 0 30	25044	Barrow near Cyn Wyl	21 35 37	48368
Llansaint Steeple -	63 20 23		Brechva Mountain -	79 27 57	
Llangynog Mountain -	13 56 57	29339	Mancha Hill - -	54 33 39	50395
Llansaint Hill -	71 4 45	7479	Barrow near Cyn Wyl	58 7 21	48351
Llansaint Steeple -	94 58 18		Brechva Mountain -	67 19 0	
Lannon Station -	45 8 7	20321			
Nelson's Tower -	31 56 42	27222			
Mancha Hill - -	102 55 11				
Lannon Station -	52 53 41	20317			
Llansaint Hill - -	34 4 49	28917			
Mancha Hill - -	93 1 30				

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Mancha Hill - -	37 15 7	27230	Rhydybont Mountain	26 11 22	37600
Brechva Mountain - -	29 51 8	33114	Sir Nicholas's Tower -	71 11 30	17529
Nelson's Tower - -	112 53 45		Talley Barrow - -	82 37 8	
Crug-edrid - -	84 16 41	32976	Dinas Rock - -	43 19 21	12676
Brechva Mountain - -	43 37 57	47551	Cyn y Gaio Mountain	21 3 24	24207
Dinas Rock, highest Point	52 5 22		Sir Nicholas's Tower -	115 37 15	
Brechva Mountain - -	45 44 34	67092	Dinas Rock - -	111 24 18	3038
Dinas Rock - -	89 7 49	48058	Cyn y Gaio Mountain -	4 54 35	33043
Trechrig Mountain - -	45 7 37		Llansowel Church Tower	63 41 7	
Dinas Rock - -	98 26 0	31812	Nelson's Tower - -	42 52 0	38582
Trechrig Mountain - -	30 49 53	61398	Mancha Hill - -	92 17 10	26268
Cyn y Gaio Barrow - -	50 44 7		Station near Mount Plea- sant - -	44 50 50	
Crug-edrid - -	64 7 42	17991	Nelson's Tower - -	34 39 0	38589
Dinas Rock - -	32 47 33	29889	Llansaint Hill - -	42 30 23	32410
Rhydybont Mountain -	83 4 45		Mount Pleasant Station -	102 44 37	
Crug-edrid - -	88 48 25	45257	Nelson's Tower - -	11 43 15	42756
Brechva Mountain - -	50 54 50	58306	Mount Pleasant Station	110 39 30	9282
Ruins of Sir Nicholas's Tower - -	40 16 45		Centre Chimney of Penlan House - -	57 37 15	
Dinas Rock - -	130 52 26	12705	Mancha Hill - -	85 59 7	34942
Rhydybont Mountain	14 7 7	39295	Nelson's Tower - -	54 35 15	42770
Sir Nicholas's Tower	35 0 52		Penlan House - -	39 25 38	
Dinas Rock - -	106 56 37	24412	Mount Pleasant Station	95 9 0	15292
Sir Nicholas's Tower -	49 43 11	30612	Mancha Hill - -	28 51 20	31559
Large Stone on Llanyrcwys Mountain - -	23 20 12		Llangain Church - -	55 59 40	
Sir Nicholas's Tower	14 42 20	39318	Mount Pleasant Station	51 26 15	12112
Llanyrcwys Mountain	126 38 55	12413	Mancha Hill - -	26 50 53	20976
Rhydybont Mountain -	38 38 45		Llan House, centre Chimn.	101 42 52	
Rhydybont Mountain -	135 50 22	12448	Llansaint Hill - -	128 44 23	10017
Crug-edrid - -	17 50 30	28304	Penbree Hill - -	15 4 19	30048
Llanyrcwys Mountain -	26 19 8		Llandevaelog Church -	36 17 18	
Rhydybont Mountain -	21 13 30	5665	Mount Pleasant Station	157 20 15	9574
Llanyrcwys Mountain	15 56 7	7470	Mancha Hill - -	5 59 57	35296
Shepherds Pen on Pen- carreg Mountain -	142 50 33		House, West end of Caer- marthen - -	16 39 48	
Dinas Rock - -	98 0 0	10431	Mancha Hill - -	26 1 48	35284
Sir Nicholas's Tower	36 10 15	17501	Llangynog Mountain -	45 21 7	21764
Barrow on Talley Mountain	45 49 45		House, &c. - -	108 37 5	



Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Llangynog Mountain -	88 14 30	23198	Margam Down - -	24 28 21	60771
Precelly Top - -	13 46 30	97379	Kilvey Windmill -	100 17 22	25586
Sir John's Hill House	77 59 0		Mumbles Lighthouse	55 14 17	
Llangynog Mountain -	156 54 3	29522	Kilvey Windmill -	93 33 30	81696
Nelson's Tower -	7 3 52	94152	Margam Down -	55 36 33	98810
Llanginning Steeple -	16 2 5		Carreg Glwydd -	30 49 57	
Llangynog Mountain -	70 23 3	29527	Margam Down -	80 5 15	98795
Sir John's Hill House -	64 28 5	30823	Mumbles Lighthouse -	65 47 13	106707
Llanginning Steeple -	45 8 52		Carreg Glwydd -	34 7 32	
Mount Pleasant Station	50 49 0	8926	Kilvey Windmill -	18 31 30	51293
Nelson's Tower -	11 51 33	33666	Carreg Glwydd -	26 14 22	36860
Aberguili Church -	117 19 27		Roman Camp on Bettws Mountain -	135 14 8	
Nelson's Tower -	154 43 7	17302	Kilvey Windmill -	106 30 23	75077
Llangynog Mountain -	5 9 0	82317	Margam Down -	44 57 52	101802
Llangathen Church -	20 7 53		Tre Carn Issa Centie Karn	28 31 45	
Nelson's Tower -	77 38 3	17295	Kilvey Windmill -	12 57 15	75084
Brechva Mountain -	29 52 12	33921	Carreg Glwydd -	63 8 38	18808
Llangathen Church -	72 29 45		Tre Carn Issa -	103 54 7	
Nelson's Tower -	93 52 40	16814	Margam Down -	71 39 22	108933
Mancha Hill - -	30 35 58	32958	Kilvey Windmill -	80 57 22	104698
File on the Great Mount.	55 31 22		New Station on Trecastle Beacon - -	27 23 16	
Lannon Station -	26 41 0	33048	Kilvey Windmill -	12 35 23	104678
Nelson's Tower -	61 57 0	16816	Carreg Glwydd -	131 53 20	30649
Great Mountain - -	91 22 0		Trecastle Beacon - -	35 31 15	
Lannon Station -	95 40 22	36204	Kilvey Windmill - -	25 32 53	104695
Cefn Bryn -	28 36 8	75255	Tre Carn Issa -	113 13 40	49112
Llansaint Hill -	55 43 30		Trecastle Beacon -	41 13 27	
Lannon Station -	113 7 49	62499	Kilvey Windmill -	26 19 3	11598
Trecastle, old Station -	22 36 12	147480	Roman Camp -	52 47 8	23158
Cefn Bryn -	43 55 59		Llanguke Church -	100 53 49	
Mancha Hill -	82 19 22	28512	Kilvey Windmill - -	8 33 0	45627
Llangynog Mountain -	33 11 3	51627	Roman Camp - -	47 42 0	9171
Highest Point of Hill near Alt y Gog - -	64 29 15		White House -	123 45 0	
Mancha Hill -	50 17	28493	Carreg Glwydd - -	102 35 15	21294
Mount Pleasant Station	59 48 22	33353	Trecastle Beacon -	39 28 37	40962
Hill near Alt y Gog -	59 54 35		Eastmost Carr. on Trecas- tle Mountain -	46 53 41	
Margam Down -	33 16 55	19616			
Kilvey Hill Windmill -	17 24 12	35990			
Vorl Vawr Barrow -	129 18 53				

Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.
Trecastle Beacon -	24 46 2	40981	Trechrig Mountain -	64 13 7	25470
Tre Carn Issa -	55 16 43	20888	Trecastle Beacon -	22 8 15	30968
Trechrig Mountain -	99 56 15		Voel y Vraith -	93 38 38	
Carreg Glwydd -	62 21 56	21326	Trechrig Mountain -	17 19 26	15491
Tre Carn Issa -	64 35 30	20917	Carreg Glwydd -	35 46 15	7988
Trechrig Mountain -	53 2 34		Voel y Vraith -	127 24 19	
Kilvey Windmill -	136 29 22	39448	Carreg Glwydd -	36 54 16	18863
Margam Down -	18 53 41	83870	Roman Camp -	27 28 51	24546
Cefn Bryn, near Pont ar Dulas -	24 36 57		Tre Carn Issa -	115 36 53	
Kilvey Windmill -	119 5 30	39421	Cefn Bryn -	89 49 35	32113
Voel Vawr -	31 59 11	65030	Lannon Station -	27 13 11	70208
Cefn Bryn P. -	28 5 49		Barrow on Rosilly Mount.	62 57 14	
Kilvey Windmill -	80 32 15	53503	Lannon Station -	68 27 15	70236
Cefn Bryn P. -	59 51 45	61024	Llansaint Hill -	80 56 11	66147
Cefn Bryn Station -	39 36 0		Rosilly Barrow -	30 36 34	
Cefn Bryn P. -	75 38 40	35507	Cefn Bryn -	73 0 15	12553
Cefn Bryn -	33 22 25	62531	Rosilly Barrow -	22 53 0	30874
Lannon Station -	70 58 55		West Chimney of House on Oxwich Point	84 6 45	
Trechrig Mountain -	64 21 30	46023	Cefn Bryn -	63 37 32	28359
Trecastle Beacon -	63 5 30	46633	Lannon Station -	26 58 4	56026
St. Mary on the Hill Steeple, Llandoverly	52 33 0		East Signal Staff on Llanmadoc Hill -	89 24 24	
Trechrig Mountain -	48 7 0	39999	Cefn Bryn -	26 12 0	28351
Carreg Glwydd -	100 16 0	30264	Rosilly Barrow -	61 55 54	14186
Barrow on the Van -	31 37 0		East Signal Staff -	91 52 6	
Trechrig Mountain -	1 42 40	39964	Lannon Station -	68 42 22	56014
Trecastle Beacon -	39 42 10	1322	Llansaint Hill -	73 5 11	54550
Barrow on the Van -	139 5 10		East Signal Staff -	38 12 27	
Trechrig Mountain -	14 20 37	25782	Cefn Bryn -	67 52 45	31061
Barrow on the Van -	23 3 26	16306	Lannon Station -	29 30 41	58414
Llandeveysant Church	142 35 27		West Signal Staff on Llanmadoc Hill -	82 36 34	
Trechrig Mountain -	14 38 47	26051	Cefn Bryn -	21 57 37	31047
Trecastle Beacon -	24 35 2	16381	Rosilly Barrow -	74 2 45	12075
Westmost Barrow on Carn-glass -	146 46 11		West Signal Staff -	83 59 38	
Trechrig Mountain -	32 14 18	26952	Lannon Station -	66 9 45	58410
Carreg Glwydd -	95 54 30	14453	Llansaint Hill -	76 43 26	54894
Westmost Barrow -	51 51 12		West Signal Staff -	37 0 49	

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Cefn Bryn - -	44 47 59	2467	Cefn Bryn P. - -	58 54 59	20852
Rosilly Barrow - -	3 16 33	30421	Cefn Bryn - - -	19 33 43	53336
Nicholaston Church -	131 56 28		Llangevelach Steeple -	101 31 18	
Cefn Bryn - -	22 0 45	8773	Lannon Station - -	54 26 32	52210
Rosilly Barrow - -	7 48 30	24204	Cefn Bryn - - -	52 56 54	53304
Penrice Steeple - -	150 10 45		Llangevelach Steeple -	72 37 24	
Lannon Station - -	42 23 52	51617	Llangevelach Steeple -	14 25 31	19522
Penbree Hill - -	105 33 52	36124	Cefn Bryn P. - -	68 11 37	5238
East Turret of Webley House - -	32 2 16		Barrow on Green Hill	97 22 52	
Lannon Station - -	85 20 33	51582	Cefn Bryn P. - -	67 14 26	5235
Cefn Bryn P. - -	58 39 4	60199	Kilvey Windmill - -	7 21 14	37719
Webley House - -	36 0 23		Barrow on Green Hill -	105 24 20	
Lannon Station - -	49 12 22	52094	Cefn Bryn P. - -	24 15 22	12242
Penbree Hill - -	98 6 11	39836	Barrow on Green Hill -	139 40 33	7772
Llanridian Steeple -	32 41 27		Barrow on the Moor -	16 4 5	
Cefn Bryn - -	54 28 37	49768	Matgam Down - -	21 25 15	80066
Rosilly Barrow - -	85 29 15	40632	Kilvey Windmill - -	129 8 8	37699
Penbree Steeple - -	40 2 28		Barrow on Green Hill	29 26 37	
Cefn Bryn - -	85 5 0	38112	Margam Down - -	34 11 18	80046
Rosilly Barrow - -	52 46 34	47686	Carreg Glwydd - -	54 4 32	55544
Llanelly Steeple - -	42 8 26		Barrow on Green Hill	91 44 10	
Cefn Bryn - -	30 36 34	38154	Carreg Glwydd - -	20 4 0	86831
Penbree Steeple - -	48 55 47	25770	Kilvey Windmill - -	89 43 7	29793
Llanelly Steeple - -	100 27 39		Signal Staff - -	70 11 43	
Cefn Bryn - -	77 42 37	38135	Carreg Glwydd - -	43 18 35	86807
Kilvey Windmill - -	39 23 8	58721	Barrow on Green Hill	97 17 40	60031
Llanelly Steeple - -	62 54 15		Signal Staff - -	39 23 45	
Lannon Station - -	43 31 55	36059	Carreg Glwydd - -	33 42 49	86035
Cefn Bryn P. - -	69 20 25	26543	Margam Down - -	60 18 3	54975
Loughor Glass Work -	67 7 40		Swansea Castle - -	85 59 8	
Lannon Station - -	54 39 33	36092	Kilvey Windmill - -	132 0 48	6052
Rosilly Barrow - -	30 49 19	57460	Margam Down - -	4 41 30	54976
Glass Work - -	94 31 8		Swansea Castle - -	43 17 42	
Cefn Bryn P. - -	27 15 12	41879	Margam Down - -	11 12 37	57078
Cefn Bryn - -	38 52 6	30561	Kilvey Windmill - -	115 18 41	12275
Machynis, West Chimney	113 52 39		Moriston Steeple - -	53 28 42	
Cefn Bryn - -	84 20 5	20551	Margam Down - -	23 32 36	80056
Rosilly Barrow - -	46 15 22	42083	Tre Carn Issa - -	48 19 16	42815
Machynis - -	49 24 33		Barrow on Green Hill -	108 8 8	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Barrow on Green Hill -	104 1 46	5236	Dinas Hill - -	86 4 44	25350
Dinas Hill - -	6 43 53	43338	Roman Camp - -	46 33 6	31757
Cefn Bryn P. - -	69 14 21		Pile on Great Mountain	47 22 16	
Tre Carn Issa - -	77 18 48	9617	Great Mountain Pile -	19 49 19	51754
Barrow on Green Hill -	12 58 50	41770	Tre Carn Issa -	129 8 45	22643
Dinas Hill - -	89 42 22		Cottage near a Plantation	31 1 56	
Cefn Bryn P. - -	80 13 27	28697	Carreg Glwydd - -	71 23 0	19889
Dinas Hill - -	36 19 26	47743	Tre Carn Issa - -	56 24 45	22627
Lannon Steeple -	63 27 7		Cottage - -	52 12 15	
Cefn Bryn P. - -	83 26 0	28675	Great Mountain Pile -	25 21 3	45943
Cefn Bryn - -	26 15 28	64388	Tre Carn Issa -	109 50 52	20911
Lannon Steeple -	70 18 32		Trechrig Mountain -	44 49 25	
Carreg Glwydd -	79 57 2	72820	Dinas Hill - -	64 32 11	7180
Margam Down -	39 47 18	112043	Tre Carn Issa -	44 49 33	9196
Lannon Steeple -	60 15 40		Carreg Cennen Castle, highest Turret -	70 38 16	
Trechrig Mountain -	23 51 52	23660	Trechrig Mountain -	25 6 52	16495
Tre Carn Issa - -	94 23 34	9631	Tre Carn Issa - -	48 34 56	9200
Dinas Hill - -	61 44 34		Carreg Cennen Castle	105 18 12	
Tre Carn Issa -	85 24 4	9610	Great Mountain -	125 18 55	45451
Roman Camp -	21 56 40	25692	Dinas Hill -	35 41 38	63566
Dinas Hill - -	72 39 16		House Highest, and on the South Side of Brechva Mountain - -	18 59 27	
Cefn Bryn P. - -	101 52 47	12297	Great Mountain -	108 1 37	16837
Dinas Hill - -	14 42 0	47442	Trechrig Mountain -	17 22 45	53601
Forest Hall, long Chimney	63 25 13		Nelson's Tower - -	54 35 38	
Barrow, Green Hill -	97 49 8	17493	Great Mountain -	14 5 41	58725
Dinas Hill - -	21 25 53	47429	Trechrig Mountain -	127 36 0	18051
Forest Hall - -	60 44 59		Llangadock Steeple -	38 18 7	
Tre Carn Issa -	30 48 52	17342	Trechrig Mountain -	110 13 15	18075
Dinas Hill - -	120 44 56	10349	Nelson's Tower -	15 49 15	62206
Glenhairn Barn -	28 26 12		Llangadock Steeple -	53 57 15	
Tre Carn Issa -	20 43 0	22014	Nelson's Tower -	70 59 0	5711
Dinas Hill - -	144 39 30	13462	Brechva Mountain -	9 48 0	31721
Llandabie Steeple -	14 37 30		Dryslwyn Castle - -	99 13 0	
Dinas Hill - -	23 54 34	13569	Nelson's Tower -	79 17 52	4268
Glenhairn Barn -	110 11 19	5834	Dryslwyn Castle -	40 27 0	6464
Llandabie Steeple -	45 54 7		Llanarthney Steeple -	60 13 30	
Tre Carn Issa -	69 56 44	34444			
Roman Camp -	68 22 40	34757			
Pile on Great Mountain	41 33 36				

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Trechrig Mountain -	0 15 30	54997	Trechrig Mountain -	47 52 30	14105
Nelson's Tower -	100 56 45	4269	Llangadock Steeple -	67 16 22	14800
Llanarthney Steeple -	68 47 45		East Chimney of a House on Myddvai Mountain	64 51 8	
Nelson's Tower -	49 5 22	6811	Llangadock Steeple -	121 15 0	14800
Lannon Station -	8 52 18	33377	Nelson's Tower -	10 15 45	71020
Centre of Middleton Hall	122 2 20		Chimney of House -	48 29 15	
Nelson's Tower -	87 15 45	6781	Garth - - -	51 48 0	58078
Llanarthney Steeple -	59 47 0	7838	Ogmoor Down -	48 49 1	60630
Middleton Hall -	32 57 15		Carn Vawr - - -	79 22 59	
Nelson's Tower -	21 28 37	11622	Garth - - -	78 32 20	42861
Dryslwyn Castle	140 11 3	6645	Carn Vawr - - -	40 17 2	64969
Belfry of Meeting House at Cross Inn -	18 20 20		Stalling Down Signal Staff	61 10 38	
Great Mountain -	7 41 45	39134	Ogmoor Down - -	27 11 37	42219
Trechrig Mountain -	36 11 50	8874	Garth - - -	26 44 21	42882
Carn y Ceggin -	136 6 25		Stalling Down Signal Staff	126 4 2	
Llangadock Steeple -	25 54 45	20324	Ogmoor Down - -	87 55 31	26587
Trechrig Mountain -	91 24 30	8865	Margam Down - -	28 46 56	55183
Carn y Ceggin -	62 40 45	*	St. Mary, Hill Steeple	63 17 33	
Trechrig Mountain -	71 27 30	23875	Ogmoor Down - -	35 30 30	26557
Great Mountain -	30 33 0	44532	Stalling Down Signal Staff	36 49 27	25735
Taliaris Pigeon House	77 59 30		St. Mary, Hill Steeple	107 40 3	
Carn y Ceggin -	96 15 0	17388	Margam Down - -	11 43 37	29019
Great Mountain -	22 50 45	44520	Ogmoor Down - -	15 44 57	21731
Taliaris Pigeon House	60 54 15		Newton Down Signal Staff	152 31 26	
Trechrig Mountain -	46 37 4	23275	Ogmoor Down - -	103 40 22	21743
Taliaris Pigeon House	64 59 56	18665	St. Mary, Hill Steeple	33 40 20	38104
Llandilo Steeple -	68 23 0		Newton Down Signal Staff	42 39 18	
Carn y Ceggin -	70 34 30	14733	Margam Down - -	100 8 49	8155
Taliaris Pigeon House	48 3 0	18682	Newton Down Signal Staff	14 46 0	31497
Llandilo Steeple -	61 22 30		Barrow on Margam Down	65 5 12	
Carn y Ceggin -	13 24 40	14242	Newton Down - -	50 17 30	12802
Llandilo Steeple -	75 3 15	3327	Margam Down - -	25 17 37	23051
Cupola on Tregib House	91 54 15		Kenfig Steeple -	104 24 53	
Nelson's Tower -	10 47 36	70831	Margam Down - -	19 26 0	22358
Trechrig Mountain -	140 17 0	29769	Newton Down - -	35 31 30	12800
Mandinam Hill -	28 55 4		Kenfig Steeple -	125 2 30	
Trechrig Mountain -	30 3 30	20753	Ogmoor Down - -	33 23 31	58553
Llangadock Steeple -	89 26 37	10395	Stalling Down Signal Staff	101 41 32	32908
Mandinam Hill -	60 29 53		Llantrisant Steeple -	44 54 57	

Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and intersected Objects.	Angles for Calculation.	Distances in Feet.
Ogmoor Down - - -	29 55 38	43012	Ogmoor Down - - -	33 15 12	14983
Gart's - - -	29 5 20	44128	Bridgend Steeple - -	67 19 22	8924
St. Hilary Steeple - -	120 54 2		Llaleston Steeple - -	79 25 26	
Garth - - -	47 21 22	49697	Bridgend Steeple - -	115 4 26	8912
Carn Vawr - - -	56 16 0	43958	Carn Vawr - - -	9 27 45	49102
St. Mary, Hill Steeple	76 22 38		Llaleston Steeple - -	55 27 49	
Carn Vawr - - -	23 46 -	44657	Ogmoor Down - - -	23 8 0	38171
St. Mary, Hill Steeple	80 15 59	18264	Stalling Down Signal Staff	64 37 17	16599
Bridgend Steeple - -	75 57 42		Windmill near a round House - - -	92 14 43	
Ogmoor Down - - -	42 19 0	15963	Ogmoor Down - - -	52 53 24	38157
St. Mary, Hill Steeple	36 2 30	18265	Carn Vawr - - -	38 58 37	48377
Bridgend Steeple - -	101 38 30		Windmill - - -	88 7 59	

ART. XIII. *Triangles for the Survey of Cambridgeshire.* Plate XIII.

Maddingly - - -	93 49 3	68127	Orwell - - -	75 6 40	22326
Balsham - - -	43 2 55	98622	Balsham - - -	17 29 10	71807
Sutton Steeple - - -	38 8 2		Hardwick Spire - -	87 24 19	
Maddingly - - -	95 17 44	30192	Orwell - - -	90 23 56	4025
Balsham - - -	25 1 8	71085	Ashwell Spire - - -	4 22 2	52860
Orwell Pole - - -	59 41 8		Orwell Pole - - -	85 14 2	
Maddingly - - -	41 32 32	88680	Royston - - -	9 45 25	71870
Balsham - - -	107 23 36	47954	Orwell - - -	155 52 3	29789
Newmarket - - -	31 3 52		Cambridge, St. Mary's	14 22 32	
Orwell - - -	91 48 45	4028	Royston - - -	4 56 35	42037
Maddingly - - -	7 39 40	30194	Orwell - - -	64 3 25	4018
Orwell Pole - - -	80 31 29		Orwell Pole - - -	111 0 0	
Orwell - - -	3 38 5	28645	Royston - - -	49 19 0	8135
Maddingly - - -	56 40 33	2181	Orwell Pole - - -	9 32 0	37249
Coton Spire - - -	120 1 22		Royston Steeple - -	121 9 0	
Orwell - - -	59 31 6	78735	Royston - - -	102 36 40	23661
Maddingly - - -	98 36 3	68608	Orwell Pole - - -	25 47 0	52868
Balsham Steeple - -	21 58 51		Ashwell Spire - - -	50 36 20	
Orwell - - -	37 47 56	4024	Royston - - -	66 13 0	24663
Balsham - - -	1 59 7	71087	Orwell Pole - - -	35 7 0	39232
Orwell Pole - - -	146 12 47		Guildford Morden - -	78 40 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Royston - - -	51 16 40	94158	Stretham Spire - -	82 23 0	26332
Orwell - - -	102 55 40	75371	Ely Minster - - -	55 6 0	31823
Balsham Steeple - -	25 47 40		Sutton Steeple - -	42 31 0	
Royston - - -	105 6 0	43842	Stretham Spire - -	80 58 0	28152
Orwell Pole - - -	41 2 0	64535	Sutton Steeple - -	51 45 30	354 0
Gog Magog - - -	33 52 0		Cottenham Steeple - -	47 16 30	
Royston - - -	26 24 0	34776	Stretham Spire - -	103 25 0	33736
Orwell Pole - - -	54 51 0	18911	Sutton Steeple - -	43 51 0	47368
Croydon Steeple - -	98 45 0		Landbeach Spire - -	32 44 0	
Orwell Pole - - -	19 45 0	39235	Stretham Spire - -	22 22 30	16762
Croydon Steeple - -	143 39 0	22369	Sutton Steeple - -	30 30 0	12572
Guildford Morden - -	16 36 0		Haddenham Spire - -	127 7 30	
Maddingly - - -	0 9 40	252	Stretham Spire - -	35 8 0	47676
Newmarket - - -	99 20 20	88721	Sutton Steeple - -	114 48 0	30216
Newmarket Telegraph	80 30 0		Bluntesham Spire - -	30 4 0	
Maddingly - - -	26 9 5	79149	Stretham Spire - -	59 45 0	71594
Newmarket - - -	63 11 10	39087	Newmarket - - -	66 39 0	67362
Soham Steeple - -	90 39 45		Gog Magog - - -	53 30 0	
Maddingly - - -	16 13 40	86579	Stretham Spire - -	12 33 0	39482
Newmarket - - -	77 4 50	24824	Newmarket - - -	19 32 0	25659
Fordham Steeple - -	86 41 30		Burwell Spire - - -	147 55 0	
Maddingly - - -	45 0 46	63040	Stretham Spire - -	27 3 0	41378
Newmarket - - -	45 18 18	62721	Newmarket - - -	96 2 0	31989
Stretham Spire - -	89 40 56		Swaffham Steeple - -	116 55 0	
Newmarket - - -	65 47 20	90650	Stretham Spire - -	41 25 0	49599
Balsham - - -	82 34 20	83376	Newmarket - - -	52 7 10	41571
Willingham Spire - -	31 38 20		Bottisham Steeple - -	86 27 50	
Newmarket - - -	86 50 48	62752	Royston - - -	49 56 30	65949
Balsham - - -	54 36 57	76852	Balsham - - -	44 39 50	71807
Stretham Spire - -	38 52 15		Hardwick Spire - -	85 23 40	
Maggots Mount - -	9 17 18	49781	Chatteris - - -	98 58 0	32032
Balsham - - -	111 5 24	8613	Ely Minster - - -	28 20 0	66663
Balsham Steeple - -	59 37 18		March Spire - - -	52 42 0	
Newmarket - - -	18 3 0	62766	Chatteris - - -	22 41 0	56054
Ely Minster - - -	63 40 40	21697	Ely Minster - - -	84 48 0	21706
Stretham Spire - -	98 16 20		Stretham Spire - -	72 31 0	
Newmarket - - -	84 43 0	67430	Chatteris - - -	104 28 0	15462
Ely Minster - - -	46 47 0	92133	Ely Minster - - -	14 35 0	59464
Gog Magog - - -	48 30 0		Doddington Spire - -	60 57 0	

Names of Stations and inter- sected Objects.	Angles for Calculation	Distance in Feet	Names of Stations and inter- sected Objects.	Angles for Calculation	Distances in Feet
Sutton Steeple	14 35	42864	Stretham Spire	97 45	698
Chatteris	135 40	15444	Balsham	38 44	110575
Doddington Spire	29 45		St. Ives Spire	43 31	
Sutton Steeple	25 36	56665	Stretham Spire	59 46 3	28158
Chatteris	130 10	32040	Balsham	21 13	67226
March Spire	24 14		Cottenham	99 0 17	
Sutton Steeple	59 54 1	30413	Stretham Spire	37 57	69851
Chatteris	60 0 1	40380	Cottenham	122 5	50700
Somersham Steeple	60 5		St. Ives Spire	19 58	
Sutton Steeple	69 19	49820	Bottisham Steeple	32 49	22757
Chatteris	93 5	17831	Stretham Spire	22 2	32876
Warboys Spire	37 15		Waterbeach	125 9	
Sutton Steeple	94 23	6735	Bottisham Steeple	34 38	41597
Chatteris	12 15	11671	Stretham Spire	56 58	28199
Witcham Steeple	73 22		Cottenham	88 24	
Sutton Steeple	134 30	1109	Bottisham Steeple	41 10	59058
Chatteris	11 42	1002	Stretham Spire	82 28	39213
Wentworth	33 48		Willingham Spire	56 22	
Chatteris	44 36	45481	Cottenham	32 40 40	3092
Sutton Steeple	93 30	12000	Balsham	22 3	44453
Downham Spire	41 54		Chesterton Spire	125 15	
Stretham Spire	20 28	77847	Cottenham	127 56	46090
Chatteris	121 48	12026	Balsham	20 49	102246
March Spire	17 44		Fen Stanton	31 13	
Stretham Spire	32 15	1675	Cottenham	132 7 2	31708
Chatteris	32 3	42821	Balsham	14 53	91566
Haddenham Spire	135 42		Swavesey Steeple	32 59	
Sutton Steeple	26 1	4859	Cottenham	105 57	20641
Ely Minster	119 4	2418	Balsham	15 13 4	75551
Little Port	34 55		Lesy Stanton	58 4	
Sutton Steeple	119 8	30431	Cottenham	83 52 4	18997
Ely Minster	29 41	1368	Balsham	16 9	67881
Chatteris	31 11		Oakingham	79 57 5	
Stretham Spire	97 45	71331	Cottenham	106 18	39156
Balsham	39 16	111671	Balsham	25 39 4	86781
Fen Stanton	42 59		Boxworth Spire	48 1 1	
Stretham Spire	105 41	47761	Cottenham	25 49	39131
Balsham	27 5 2	100781	Swavesey Steeple	101 40	17401
Bluntham Spire	47 12 4		Boxworth Spire	52 31	



Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Cottenham - -	26° 12' 0"	20631	Puttock's Bridge - -	136° 21' 0"	9289
Swavesey Steeple - -	34 37 0	16035	Chatteris - -	15 34 0	23892
Long Stanton - -	119 11 0		Benwick Chapel - -	28 5 0	
Cottenham - -	4 10 30	46363	Chatteris - -	58 12 0	16303
Swavesey Steeple - -	166 51 0	14837	Warboys Spire - -	25 21 0	32361
Fen Stanton - -	8 58 30		Puttock's Bridge - -	90 27 0	
Bottisham Steeple - -	22 25 20	34798	Chatteris - -	28 57 0	35578
Balsham Station - -	109 44 40	14102	Warboys Spire - -	68 44 0	18479
Weston Colville - -	47 50 0		Ramsey Steeple - -	82 19 0	
Bottisham Steeple - -	105 28 40	28478	Balsham - -	19 31 0	46031
Balsham Station - -	38 6 0	44480	Royston - -	17 3 10	52437
Chesterton Spire - -	36 25 20		Maggot's Mount - -	143 25 50	
Bottisham Steeple - -	38 10 20	28755	Maggot's Mount - -	21 35 30	17736
Balsham - -	74 53 40	18407	Royston - -	10 17 30	36532
Westley Steeple - -	66 56 0		Foulmire Steeple - -	148 7 0	
Bottisham Steeple - -	15 35 0	9361	Foulmire Steeple - -	20 52 0	14318
Balsham - -	7 47 20	18557	Royston - -	12 25 20	23709
Great Wilbraham - -	156 37 40		Melbourn Steeple - -	146 42 40	
Bottisham Steeple - -	39 11 20	29236	Foulmire Steeple - -	105 49 0	20526
Balsham - -	75 36 0	19073	Royston - -	25 7 0	46526
Borough Green - -	65 12 40		Chapel Bush - -	49 4 0	
Bottisham Steeple - -	24 12 0	39234	Foulmire Steeple - -	47 32 0	15643
Cottenham - -	70 8 0	17101	Royston - -	23 57 24	28420
Histon Steeple - -	85 40 0		Meldreth Steeple - -	108 30 36	
Stretham Spire - -	17 9 0	17195	Foulmire Steeple - -	40 20 0	7527
Sutton Steeple - -	27 7 0	11124	Maggots Mount - -	22 6 0	12950
Wentworth Steeple - -	135 44 0		Thriplow Steeple - -	117 34 0	
Stretham Spire - -	39 1 0	26833	Foulmire Steeple - -	42 18 0	20505
Sutton Steeple - -	72 1 0	17760	Maggot's Mount - -	79 27 0	14038
Coveney Steeple - -	68 58 0		Chapel Bush - -	58 15 0	
Stretham Spire - -	115 52 0	32917	Foulmire Steeple - -	51 32 0	23772
Sutton Steeple - -	36 3 0	50331	Chapel Bush - -	72 52 0	19477
Waterbeach - -	28 5 0		Great Shelford Spire - -	55 36 0	
Chatteris - -	147 47 0	16319	Maggot's Mount - -	29 45 0	20243
Haddenham Spire - -	8 44 0	57298	Balsham Steeple - -	17 19 20	33736
Puttock's Bridge - -	23 29 0		Gog Magog Telegraph - -	132 55 40	
Chatteris - -	72 59 0	16295	Balsham - -	23 26 0	12373
Doulington - -	55 35 0	18887	Gog Magog - -	12 27 0	22824
Puttock's Bridge - -	51 26 0		Gunner Hill, Tree - -	144 7 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Balsham - - -	157° 58' 0"	6100	Gog Magog - - -	35° 3' 3"	32415
Gog Magog - - -	3° 20' 0"	39362	Hardwick Spire - - -	45° 34' 3"	26072
Wratting Mill - - -	18° 42' 0"		Chapel Bush - - -	99° 22'	
Balsham - - -	119° 16' 0"	19707	Gog Magog - - -	22° 31'	50241
Gog Magog - - -	21° 40' 0"	46564	Chapel Bush - - -	126° 2'	23792
Brinkley Steeple - - -	39° 4' 0"		Caldecot Steeple - - -	31° 27'	
Gog Magog - - -	20° 54' 0"	32004	Gog Magog - - -	23° 1'	46553
Gunner Hill, Thorn - - -	121° 47' 0"	13431	Chapel Bush - - -	119° 49'	20979
Linton Mill - - -	37° 19' 0"		Toft Steeple - - -	37° 10'	
Gog Magog - - -	4° 6' 0"	33515	Hardwick Spire - - -	88° 1'	13621
Linton - - -	120° 44' 0"	2787	Orwell Pole - - -	29° 53'	27321
Linton Steeple - - -	55° 10' 0"		Ash Tree - - -	62° 6'	
Balsham - - -	25° 51' 0"	12619	Orwell Pole - - -	36° 30'	31052
Balsham Steeple - - -	116° 30' 0"	6148	Hardwick Spire - - -	92° 29'	18487
Wratting Mill - - -	37° 39' 0"		Crow Hill Lea - - -	51° 1'	
Balsham - - -	160° 27' 5"	19714	Hardwick Spire - - -	114° 43' 1"	13622
Royston - - -	3° 20' 55"	112930	Chapel Bush - - -	21° 16' 5"	34093
Brinkley Steeple - - -	16° 12' 0"		Ash Tree - - -	44° 0'	
Gog Magog - - -	33° 19' 0"	32004	Ash Tree - - -	62° 53'	8589
Balsham Steeple - - -	68° 34' 40"	18883	Chapel Bush - - -	14° 13'	31129
Linton Mill - - -	78° 6' 20"		Bourne Spire - - -	102° 54'	
Balsham Steeple - - -	65° 27' 0"	24823	Ash Tree - - -	118° 10'	11577
Linton Mill - - -	69° 13' 0"	24150	Chapel Bush - - -	14° 28'	40853
Shudy Camps Steeple - - -	45° 20' 0"		Caxton Steeple - - -	47° 22'	
Balsham Steeple - - -	67° 56' 0"	6133	Ash Tree - - -	90° 6'	5068
Shudy Camps - - -	14° 10' 0"	23225	Bourne Spire - - -	30° 31'	9981
Wratting Mill - - -	97° 54' 0"		Lea Ash - - -	59° 23'	
Balsham Steeple - - -	70° 12' 0"	12680	Ash Tree - - -	75° 26'	13560
Wratting Mill - - -	81° 7' 0"	12075	Lea Ash - - -	82° 48'	13228
Horseheath Mill - - -	28° 41' 0"		Long Stow Steeple - - -	21° 46'	
Balsham Steeple - - -	39° 5' 0"	10186	Fordham Steeple - - -	67° 3'	22052
Wratting Mill - - -	105° 19' 0"	6658	Newmarket Telegraph - - -	51° 40' 30"	25884
West Wickham Steeple - - -	35° 36' 0"		Burwell Spire - - -	61° 16' 30"	
Orwell Pole - - -	121° 51' 0"	22047	Fordham Steeple - - -	36° 49'	18316
Gog Magog - - -	18° 40' 0"	58512	Newmarket Telegraph - - -	47° 42'	14840
Bourne Spire - - -	39° 29' 0"		Exning Steeple - - -	95° 29' 0"	
Stretham Spire - - -	36° 11' 0"	72588	Fordham Steeple - - -	12° 46'	24824
Gog Magog - - -	73° 7' 0"	44784	Newmarket Telegraph - - -	85° 25' 0"	5503
Hardwick Spire - - -	70° 42' 0"		Newmarket Great Church - - -	81° 49' 0"	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation	Distances in Feet.
Sutton Steeple -	47 10 0	68571	Wisbich - -	88 17 0	64282
Little Port - -	87 45 0	50325	Ely Minster - -	32 17 0	120300
Isleham Steeple -	45 5 0		Thorney Abbey -	59 26 0	
Ely Minster - -	53 26 0	103629	Downham - -	69 54 0	56497
Chatteris - -	95 31 30	83627	Wisbich - -	55 44 0	64192
Wisbich - -	31 2 30		Lynn Old Tower -	54 22 0	
Wisbich - -	57 16 0	64245	Downham - -	5 24 0	52636
Chatteris - -	47 52 0	72875	Wisbich - -	57 28 0	5875
Thorney Abbey -	74 52 0		Walsoken - -	117 8 0	
Ely Minster - -	57 25 0	82477	Chatteris - -	64 56 0	56557
March Spire - -	72 15 0	72970	Wisbich - -	40 39 0	78642
Downham - -	50 20 0		Whittlesea - -	74 25 0	
Doddington - -	67 10 0	84730	Chatteris - -	46 19 0	35616
Ely Minster - -	71 12 0	82491	Whittlesea - -	38 52 0	41045
Downham - -	41 38 0		Ramsey Steeple -	94 49 0	
Ely Minster - -	26 14 0	77803	Lynn - -	105 12 0	19541
Downham - -	69 45 0	36657	Wisbich - -	15 13 0	71844
Upwell Spire - -	84 1 0		Middleton Steeple -	59 35 0	
Ely Minster - -	34 31 0	111362	Lynn - -	40 47 0	10676
Downham - -	98 22 0	63782	Wisbich - -	7 5 0	56550
Leverington Spire -	47 7 0		Clench Wharton -	132 8 0	
Ely Minster - -	32 16 0	103625	Lynn - -	13 43 0	18858
Downham - -	95 19 0	55562	Wisbich - -	5 34 0	46099
Wisbich - -	52 25 0		Tinley St. Lawrence -	160 43 0	
Wisbich - -	17 33 0	104709	Lynn - -	95 13 0	10650
Ely Minster - -	83 9 0	31801	Downham - -	10 27 0	58472
Sutton - -	79 18 0		Clench Wharton -	74 20 0	
Wisbich - -	108 12 0	64206	Lynn - -	50 47 0	19520
Ely Minster - -	26 15 0	137904	Downham - -	18 53 30	46708
Lynn, Old Tower -	45 35 0		Middleton Steeple -	110 19 30	
Wisbich - -	82 48 0	99156	Lynn - -	68 8 0	18842
Ely Minster - -	47 10 0	134146	Downham - -	19 27 0	52513
Peterborough Cathedral	50 2 0		Tinley St. Lawrence -	92 25 0	
Wisbich - -	9 42 0	85069	Lynn - -	54 33 0	58331
Ely Minster - -	35 56 0	24424	Downham - -	64 30 0	52646
Little Port - -	134 22 0		Walsoken - -	60 57 0	
Wisbich - -	106 48 0	75507	Whittlesea - -	6 44 0	70598
Ely Minster - -	29 57 0	144787	Wisbich - -	44 11 0	11877
Crowland Abbey -	43 15 0		Walton Steeple -	129 5 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Whittlesea - -	12 2 0	58317	Cottenham - -	12 21 0	66803
Wishich - -	29 23 0	24779	St. Ives - -	135 32 0	20397
Parson's Drove -	138 35 0		King's Bush - -	32 7 0	
Whittlesea - -	68 57 0	46651	St. Ives - -	33 42 0	23543
Wishich - -	35 8 0	75655	King's Bush - -	86 27 0	13788
Crowland Abbey -	75 55 0		Huntingdon Steeple -	59 51 0	
Peterborough - -	11 11 0	78628	St. Ives - -	156 19 0	15252
Wishich - -	34 42 10	26786	King's Bush - -	10 6 30	34905
Whittlesea Spire -	134 6 50		Wheat Sheaf Inn - -	13 34 30	
Peterborough - -	91 14 0	23991	Wheat Sheaf Inn - -	23 58 0	57885
Whittlesea - -	41 18 0	36333	King's Bush - -	127 25 0	29604
Yaxley Spire - -	47 28 0		Eltesley Spire - -	28 37 0	
Cottenham - -	87 8 0	66797	Cottenham - -	16 48 0	69222
Sutton - -	64 20 0	74016	King's Bush - -	88 29 0	20014
King's Bush - -	28 32 0		Yelling Spire - -	74 43 0	

ART. XIV. *Secondary Triangles for the Survey of the remaining Part of Berkshire,\* together with Part of Bedfordshire and Part of Buckinghamshire. Plate XIV.*

The Distances serving as Base Lines for the following Triangles are,

Pen Steeple to Stanmore Station	- -	75325.4 Feet
Bagshot Heath to Nuffield	- -	105321.2
Bagshot Heath to Hind Head	- -	92425.9
Quainton to Bow Brickhill	- -	67491.4
Lillyhoe to Bow Brickhill	- -	69868
Kensworth to Bow Brickhill	- -	57668
Kensworth to Wendover	- -	67096.7
Brogborough from Bow Brickhill	- -	22586.7
Kensworth to Stanmore Station	- -	98577.5
St. Ann's Hill to Hanger Hill Tower	- -	68895.8
St. Ann's Hill to Pen Steeple	- -	92000.5

Stanmore -	73 17 18	107464	Wendover	59 18 14	193032
Bagshot Heath	47 10 13	140342	Stanmore	86 55 28	166125
Wendover	59 32 29		Royston	33 46 18	
Wendover	102 22 26	92402	Wendover	64 43 46	114355
Stanmore	35 20 38	156020	Stanmore	60 26 30	118884
Bow Brickhill	42 16 56		Lillyhoe	54 49 44	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distance in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Pen Steeple	70 12	56120	Kensworth - -	0 21 5	41929
Stanmore -	43 9 20	77198	Bow Brickhill - -	11 20 33	16176
Windsor Castle	66 38 40		Hill Farm - -	164 18 2	
Pen Steeple	12 20 40	79987	Hill Farm - -	54 39 4	20862
Stanmore -	99 20 20	17330	Kensworth - -	29 40 4	34371
Harrow Spire	68 19		Leighton Spire -	95 39 3	
Bagshot Heath	48 47 12	105322	Kensworth - -	59 9 4	18212
Nuffield -	71 13 46	83680	Leighton Spire -	31 59 2	29518
Pen Steeple	59 59		Ivinghoe Hill -	88 51	
Hind Head -	18 44 32	180325	Leighton Spire -	9 58	29816
Bagshot Heath	143 30 44	97436	Ivinghoe Hill -	88 22	5162
Nettlebed -	17 44 44		Ivinghoe Spire -	81 40	
Bow Brickhill	61 13 54	77064	Leighton Spire -	24 36 30	44328
Hanslope -	75 33 59	69735	Ivinghoe Hill -	119 36	21229
Pavenham -	43 12		Tring Steeple -	35 47 30	
Bow Brickhill	70 16	107275	Wendover - -	30 7 54	53027
Hanslope -	79 45	102614	Kensworth - -	21 49 6	09088
Keysoe Spire	29 58 56		Long Crindon Mill -	28 3	
Bow Brickhill	58 19 58	84080	Long Crindon Mill -	3 40 3	51061
Hanslope -	81 46 57	72304	Kensworth - -	3 13 26	58217
Sharnbrook -	39 53 5		Bearston Steeple -	73 6	
Bow Brickhill	40 28 54	77236	Long Crindon Mill -	12 56 30	17184
Hanslope -	94 52 48	50324	Kensworth - -	7 47	16857
Cobham's Pillar	44 38 18		Brill Spire - -	59 16 30	
Quainton -	75 4 46	58758	Hill Farm - -	70 40 16	34281
Bow Brickhill	47 19 1	77236	Bow Brickhill -	81 30 20	32707
Cobham's Pillar	57 36 13		Stewkley Steeple -	27 49 24	
Quainton -	75 15 34	79188	Brogborough -	15 7 14	36711
Bow Brickhill	49 13 49	62013	Bow Brickhill -	43 18 40	16023
Stow Pyramid	55 30 37		Bletchley Steeple -	21 34 6	
Lillyhoe -	15 19 30	118629	Brogborough -	11 37 10	30625
Bow Brickhill	44 51 38	54475	Bow Brickhill -	40 13 50	9642
Hanslope Spire	19 48 52		Fenny Stratford -	28 9 0	
Lillyhoe -	28 29 54	80236	Brogborough -	25 53 50	17875
Bow Brickhill	90 58 5	38289	Bow Brickhill -	0 11 40	10163
Wing Steeple	60 32 1		Wavendon Steeple -	03 54 30	
Lillyhoe -	35 46 6	87764	Kensworth - -	41 16 0	01059
Bow Brickhill	91 30 2	51317	Stanmore - -	71 15 30	70387
Wingrave Steeple	52 43 52		Berkhampstead Gazebo	67 28 30	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Kensworth -	23 5 15	60355	Pen Steeple -	22 44 0	14373
Stannmore -	28 53 40	48981	Windsor Flag Staff -	7 23 0	43221
St. Peter's Steeple, St. Al- bans -	128 1 5		Beaconsfield Spire -	149 53 0	
Kensworth -	72 40 10	18282	Beaconsfield -	64 43 0	30703
Stannmore -	10 36 50	94754	Windsor Castle -	42 42 0	40911
Crawley Clump -	96 43 0		Cookham Dean, Tree	72 35 0	
St. Ann's Hill -	14 48 30	77205	Windsor Castle -	15 0 0	24042
Hanger Hill Tower -	106 14 0	20551	Cookham Dean, Tree	19 20 0	18796
Harrow Spire -	58 57 30		Bray Steeple -	145 40 0	
St. Ann's Hill -	55 35 6	77207	Windsor Castle -	19 50 50	37756
Pen Steeple -	52 47 22	79274	Cookham Dean, Tree	66 59 0	13927
Harrow Spire -	71 37 32		Mount Pleasant -	93 10 10	
St. Ann's Hill -	70 23 36	68893	Windsor Castle -	45 21 0	18790
Pen Steeple -	43 17 40	94639	Cookham Dean, Tree	25 43 0	30805
Hanger Hill Tower -	66 18 44		Farnham Steeple -	108 56 0	
Pen Steeple -	35 0 0	14386	Windsor Castle -	107 35 10	14202
Harrow Spire -	6 54 0	68687	Cookham Dean, Tree	16 40 50	47165
Beaconsfield Spire -	138 6 0		Langley Steeple -	55 44 0	
Harrow Spire -	35 21 30	31260	Cookham Dean, Tree	24 2 0	14238
Beaconsfield -	22 43 30	46888	Bray Steeple -	45 2 0	8196
Hillingdon Steeple -	121 55 0		Taplow Church Yard, Yew -	110 56 0	
Hillingdon Steeple -	110 52 0	5991	Cookham Dean, Tree	45 34 0	33552
Harrow Spire -	9 31 0	33864	Bray Steeple -	101 5 0	24416
Uxbridge Steeple -	59 37 0		Fox's Large House -	33 21 0	
Hillingdon Steeple -	106 2 0	18063	Cookham Dean, Tree	46 29 0	35272
Harrow Spire -	25 36 0	40178	Bray Steeple -	102 7 50	26161
Hare and Hounds -	48 22 0		Stoke Spire -	31 24 0	
Hillingdon Steeple -	152 43 0	15715	Cookham Dean, Tree	86 18 0	22660
Harrow Spire -	9 3 0	45798	Bray Steeple -	37 50 0	13928
Iver Heath Direction Post	18 14 0		Mount Pleasant -	55 52 0	
Beaconsfield -	72 6 0	14308	Cookham Dean, Tree	45 2 0	30753
Pen Steeple -	53 44 0	10886	Bray Steeple -	97 44 0	21978
Woburn Green, Tree.	54 10 0		Farnham Steeple -	37.14 0	
Beaconsfield -	85 10 0	30739	Cookham Dean, Tree	102 34 0	17248
Pen Steeple -	68 56 10	32823	Bray Steeple -	36 47 0	28114
Cookham Dean, Tree	25 53 50		Woburn Green, Tree	40 39 0	
Beaconsfield -	9 2 0	15466	Cookham Dean, Tree	75 56 0	9717
Pen Steeple -	110 5 0	2585	Bray Steeple -	29 50 0	18945
Meeting House, Pen Beacon -	00 53 0		Cookham Steeple -	74 14 0	

Names of Stations and intersected objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and intersected Objects.	Angles for Calculation	Distances in Feet.
Woburn Green, Tree	102 12 40	18766	Woburn Green, Tree	27 19 0	4214 2
Mount Pleasant -	62 41 0	20648	Bray Steeple -	115 38 0	21449
Marlow Hill, Tree -	15 6 20		Shottesbrook Spire -	37 3 0	
Woburn Green, Tree	83 28 0	10287	Cookham Dean, Tree -	153 45 0	55603
Mount Pleasant -	67 1 0	11102	Windsor Castle -	15 9 0	94099
Little Marlow Spire -	29 31 0		Nettlebed -	11 46 0	
Marlow Hill, Tree -	74 40 0	10301	Nettlebed -	22 53 0	20690
Woburn Green, Tree -	31 46 0	18869	Cookham Dean, Tree	12 25 0	37417
Great Marlow Spire	73 34 0		Clump above Henley -	144 42 0	
Farnham Steeple -	87 53 0	10868	Nettlebed -	27 47 20	48142
Bray Steeple -	26 43 0	24156	Windsor Castle -	23 32 40	56188
Herschel's Telescope -	65 24 0		Ruscombe Steeple -	128 40 0	
Farnham Steeple -	20 46 0	10159	Nettlebed -	43 27 0	16911
Bray Steeple -	16 6 0	12589	Ruscombe Steeple -	17 58 0	37703
Burnham Steeple -	143 8 0		Fawley Steeple -	118 35 0	
Hare and Hounds -	51 19 0	4121	Nettlebed -	25 18 30	36657
Hillingdon Steeple -	11 44 0	15818	Ruscombe Steeple -	16 14 30	12126
Denham Spire -	116 57 0		Shiplake Steeple -	58 27 0	
Beaconsfield -	51 41 0	20641	Nettlebed -	16 40 0	20707
Hillingdon -	25 27 0	37687	Ruscombe Steeple -	11 51 0	26921
Sir H. Gitt's Monument	102 52 0		Henley Clump -	151 29 0	
Beaconsfield -	48 14 30	29018	Ruscombe Steeple -	22 20 0	8903
Cookham Dean, Tree	62 12 30	24637	Shiplake Steeple -	41 1 0	5155
Hill Farm, Ash, near Wickham -	69 33 0		Walgrave Steeple -	116 39 0	
Cookham Dean, Tree	28 43 0	30860	Ruscombe Steeple -	28 23 0	24347
Beaconsfield -	76 5 0	15276	Shiplake Steeple -	128 46 0	14842
Meeting House, Pen -	75 12 0		Henley Steeple -	22 51 0	
Cookham Dean, Tree -	89 0 0	29330	Nettlebed -	6 39 0	39283
Beaconsfield -	44 8 0	42116	Shiplake Steeple -	117 26 0	5125
Whitlington Park, Clump	46 52 0		Walgrave Steeple -	55 55 0	
Mount Pleasant -	40 44 0	18636	Nettlebed -	15 10 0	20731
Cookham Dean, Tree	90 59 0	12163	Walgrave Steeple -	15 43 0	20023
Cupola, Large House, Maidenhead -	48 21 0		Henley Clump -	149 7 0	
Mount Pleasant -	30 42 0	37557	Nettlebed -	41 54 0	28982
Bray Steeple -	116 41 0	21463	Walgrave Steeple -	22 57 0	16922
Shottesbrook Spire -	32 37 0		Fawley Steeple -	115 9 0	
			Walgrave Steeple -	82 42 0	9610
			Ruscombe Steeple -	51 8 0	12242
			Jews Summer House	46 10 0	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Kensworth - -	13 12 40	117116	Hadwell Barrow -	118 9 40	14278
Quainton - -	137 18 50	39479	Long Crindon Mill -	16 36 20	44048
Brill Steeple - -	29 28 30		Aston Hill, Cot. House -	45 14 0	
Kensworth - -	20 27 3	65341	Hadwell Barrow -	78 15 0	36616
Quainton - -	43 50 18	32962	Long Crindon Mill -	54 36 0	43013
Aylesbury Spire -	115 42 39		Risborough Spire -	52 9 0	
Quainton - -	81 56 22	51062	Hadwell Barrow -	19 39 0	27340
Long Crindon Mill -	42 0 43	34516	Long Crindon Mill -	43 24 0	13381
Bearston Steeple -	56 2 55		Kingsley Mill -	116 57 0	
Long Crindon Mill	2 30 0	43788	Hadwell Barrow - -	66 47 0	42212
Bearston Steeple -	14 38 0	7560	Tame Steeple -	79 22 0	39472
Aylesbury Spire -	162 52 0		White Leaf Cross -	33 51 0	
Long Crindon Mill	53 10 0	51505	Aylesbury Spire -	50 56 0	42212
Aylesbury Spire -	72 39 0	43189	Hadwell Barrow -	24 5 0	39472
Lousley Row Mill -	54 11 0		Ellesborough Station -	104 59 0	
Quainton - -	66 2 55	42779	Ellesborough Hill -	63 13 0	22226
Aylesbury Spire -	44 45 45	43756	Aylesbury Spire -	51 7 0	25490
Long Crindon -	69 11 20		White Hill Barrow -	65 40 0	
Long Crindon Mill -	26 35 0	51895	Ellesborough Hill -	41 24 0	27715
Aylesbury Steeple -	96 31 0	23374	Aylesbury Spire -	74 5 0	19559
Whitchurch Steeple -	56 54 0		Dinton Steeple -	64 31 0	
Long Crindon Mill -	101 32 0	35467	Ellesborough Hill -	28 24 0	26930
Aylesbury Spire -	34 21 0	61588	Aylesbury Spire -	79 42 0	13018
Hadwell Barrow -	44 7 0		Stone Mill -	71 54 0	
Long Crindon Mill -	84 55 0	44047	Ellesborough Hill -	26 58 0	39150
Aylesbury Spire -	47 45 0	59273	Aylesbury Spire -	116 31 0	19841
Aston Hill, Cot. House	47 20 0		Canny Hill Tree -	36 31 0	
Whitchurch -	20 43 0	78891	Ellesborough Hill -	88 26 0	26310
Long Crindon Mill -	128 7 0	35472	Aylesbury Spire -	10 17 0	4698
Hadwell Barrow -	31 10 0		Wendover New Station -	81 17 0	
Hadwell Barrow -	7 12 0	23924	Aylesbury Spire -	22 55 0	43311
Long Crindon Mill	14 20 0	12112	Wendover New Station	128 53 0	21030
Tame Steeple -	158 28 0		Lousley Row Mill -	28 12 0	
Hadwell Barrow -	73 58 0	42241	White Hill Barrow -	34 3 0	9264
Long Crindon Mill -	59 37 0	47062	Ellesborough Barrow	19 36 0	15403
White Leaf Cross -	46 25 0		Weston Turville Steeple	126 21 0	
Hadwell Barrow -	15 14 0	37493	White Hill Barrow -	17 11 0	22847
Long Crindon Mill -	94 6 0	9877	Aylesbury Spire -	61 31 0	7679
Chearsley Steeple -	70 40 0		Bearston Spire -	101 18 0	



Names of Stations and inter- sected Objects.	Angles for Calculation	Distance in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
White Hill Barrow -	97 27	13598	Winslow Steeple -	130 7	15916
Bearston Steeple -	28 43	28063	Buckingham Spire -	16 15	43497
Barrow above Wendover	53 50		Mursley Steeple -	33 38	
Wendover Barrow -	131 5	8729	Winslow Steeple -	62 46	15648
Bearston Spire -	11 1	34433	Buckingham Spire -	29 45	28039
Jenkins's Farm -	37 54		Great Harwood Mill	87 29	
Long Crindon Mill -	49 58	17695	Great Harwood Mill -	13 53	36449
Tame Steeple -	86 55	13568	Winslow Steeple -	156 6	21586
Haddenham Steeple -	43 7		Oving Steeple -	10 1	
Long Crindon Mill	79 46	9883	Great Harwood Mill -	64 10	19477
Tame Steeple -	43 12	14207	Winslow Steeple -	67 47	18937
Chearsley Steeple -	57 2		Padbury Steeple -	48 3	
Tame Steeple -	114 36	13545	Winslow Steeple -	15 45	20632
Hadwall Barrow -	22 37	32058	Padbury Steeple -	99 19	5074
Haddenham Steeple -	42 47		Thornborough Steeple	64 56	
Aylesbury Spire -	5 37	19099	Buckingham Spire -	29 50	12290
Stone Mill -	162 40	6274	Stow Monument -	45 25	16984
Dinton Steeple -	11 43		Tingewick Spire -	54 45	
Hadwall Barrow -	20 31	7895	Cookham Dean, Tree	37 13	21231
Aston Hill, Cot House	21 54	7419	Bray Steeple -	81 58	12979
Aston Steeple -	137 35		Burnham Steeple -	61 9	
Kensworth -	59 9	17964	Tingewick Spire -	12 38	17315
Leighton Spire -	31 23	29513	Buckingham Spire -	140 31	5963
Ivinghoe Hill -	89 27		Mairs Moreton -	26 47	
Leighton Spire -	9 58	29816	Long Crindon Mill -	3 34	109083
Ivinghoe Hill -	88 22	5162	Bearston Spire -	173	58217
Ivinghoe Spire -	81 40		Kensworth -	26	
Leighton Spire -	24 36	44328	Brill -	11 32	75747
Beacon Hill -	119 36	21229	Whitchurch Mill -	143 29	25475
Ting Steeple -	35 47		Wingrave Steeple -	24 57	
Quainton -	40 3	21877	Wingrave Steeple -	25 6	43242
Cobham's Obelisk -	18 31	44307	Whitchurch Steeple -	126 42	22888
Winslow Steeple -	21 25		Waddesdon Steeple -	28 11	
Winslow Steeple -	9 2	31504	Brill -	113 1	32132
Cobham's Obelisk -	20 33	14091	Bicester -	42 49	72668
Buckingham Spire -	50 25		Whitchurch Steeple -	23 58	
Winslow Steeple -	4 52	11624	Whitchurch Steeple -	40 46	22888
Buckingham Spire -	7 25	26188	Bicester -	15 6	57325
Padbury Steeple -	67 43		Waddesdon Steeple -	124 7	

Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.	Names of Stations and inter- sected Objects.	Angles for Calculation.	Distances in Feet.
Bicester - - -	13 29 0	11844	Aylesbury Spire	30 27 40	23416
Waddesdon Steeple -	3 27 0	45891	Quainton -	42 53 17	17443
Black Thorn Smoke Mill	163 4 0		Whitchurch Steeple	106 39 3	
Bicester - - -	26 57 0	22548	Quainton -	78 31 0	21878
Waddesdon Steeple -	15 21 0	38603	Whitchurch Steeple	58 36 0	25118
Marsh Steeple -	137 42 0		Winslow Steeple	42 53 0	
Bicester - - -	74 16 0	15665			
Waddesdon Steeple -	15 51 30	55178			
Stratton Audley Steeple	89 53 30				

### ART. XV. *Altitudes of the Stations.*

For the purpose of obtaining the elevations of the Stations from the level of the sea, when the instrument was used in Anglesea, the height of Llanellian Mountain, above low water-mark, was found, by levelling with the portable transit, to be 582 feet 9 inches. After the measurement of the Base on Rhuddlan Marsh was finished, a similar operation gave 25 feet 5 inches for the height of the Station near Abergelle, above the surface of the sea at low water.

The height of the steeple of the New Church at Milford, building in the year 1803, was 37 feet from its base. The ground on which the tower stands is 126 feet above low-water mark. This was found trigonometrically, the large circular instrument being used on the occasion. The top of the part of this steeple then built, from the surface of the sea at low water, was therefore 163 feet.

The depression of the point, denoting low water-mark, near the rocks on Redcar Sands, was carefully observed from the Station at Burleigh Moor, from which, and the computed distance, 553.2 feet, was given for the altitude of that Station.

The height of Beryl Hill, near Poulton, in Lancashire, above low water, was found trigonometrically, by means of two intermediate stations on the coast, with the large instrument, to be 128.5 feet.

The elevation of the Station at Moel Rhyddlad, above the level of the sea, derived from the measured altitude of Llanellian Mountain in Anglesea, is 465.4 feet, and that of Llwydiart Mountain is 523 feet. From these two Stations, as also from Moel Rhyddlad, the highest part of Snowdon was observed. The angles subtended by the top of Snowdon and the horizon, found in the first section, give 3561 feet for the mean height of that mountain. The altitudes, separately deduced, are 3562.2,—3559.5, and 3561.2 feet, allowing for curvature, and the same proportional part of the arcs for refraction.

The height of Garreg Mountain, deduced from Rhuddlan Marsh, is 835 feet, and its depression beneath Snowdon 2740 feet; therefore 3575 feet is the height of Snowdon above the level of the sea by this mode: hence we have a difference of 14 feet between these independent results; and if a mean be taken, we get 3568 feet for the height of that mountain above the level of the sea at low water.

If a series of triangles, extending from any one point on the coast to any other point of it, has, at each extremity, a base of altitude from one common level, accurately measured, in deducing the elevations or depressions of the Stations, each base should be applied to the Stations in its vicinity; and, towards the middle of the series, the altitudes should be computed from each base, and the mean taken for the true results. On this principle the altitudes of the Stations mentioned in this work have, for the most part, been computed.

Dundry Beacon, near Bristol, is 790 feet above the level of the sea according to our former determination. See the Philosophical Transactions for the year 1800, page 715. In computing the altitudes of the Stations made mention of in that volume, the base of altitude at Maker Heights, near Plymouth, was used, and the truth of the process verified, in some degree, by a comparison between the computed altitude of Lugshorn Corner, the eastern extremity of the base line on Sedgemoor, and the height of it as deduced by another method.

The altitudes of the Stations in South Wales, given in this article, are deduced in the following manner:

The height of Milford Church Tower, from the level of the sea at low water, is 163 feet. At the Station near St. Ann's Light House, at the mouth of Milford Haven, the top of Milford Steeple is depressed 40' 24" with this angle; and the computed distance between the Tower and the Station, allowing for curvature and refraction, as well as the height of the telescope of the great Theodolite from the ground, the height of the Station, above the level of the sea, appears to be 235 feet.

The Station named Highgate Mountain is 131 feet above the top of Milford Steeple. Its height, above the sea, is therefore 294 feet. The angle used in the computation is 19' 36", being the observed depression of Milford Steeple from the Station on Highgate Mountain. From these Stations Highgate Mountain, and St. Ann's Height, proceeding eastward, computing the differences of altitude according to the usual method, we get

The Height of,	As deduced from.	Feet,	Mean Height,
Plumstone Down	{ St. Ann's Heights - - - 570 Highgate Mountain - - - 577 }	573	
Newton Down -	{ Highgate Mountain - - - 322 St. Ann's Heights - - - 328 Plumstone Down - - - 316 }	325	
Precelly Top -	{ Newton Down - - - 1758 Highgate Mountain - - - 760 Plumstone Down - - - 1744 }	1754	
Marros Beacon	{ Newton Down - - - 510 Highgate Mountain - - - 501 Precelly Top - - - 551 }	514	
Cefn Bryn -	{ Marros Beacon - - - 583 Lannon - - - 905 Cefn Bryn - - - 918 }	583	
Lannon -	{ Lannon - - - 1097 Cefn Bryn - - - 1101 }	1099	
Margam Down -	{ Precelly Top - - - 1285 Precelly Top - - - 1181 Brenin Fawr - - - 1173 }	1285	
Brenin Fawr -	{ Brenin Fawr - - - 1143 Talsarn - - - 1026 New Inn Hill - - - 1046 }	1143	
New Inn Hill -	{ Talsarn - - - 1026 New Inn Hill - - - 1046 Cefn Bryn - - - 292 Margam Down - - - 292 }	1033	
Talsarn -	{ Cefn Bryn - - - 292 Margam Down - - - 292 Lannon - - - 2596 Trecastle Beacon - - - 1859 Llangenor Mount. - - - 981 The Garth - - - 1568 Mynydd Mane - - - 1566 }	292	
Capel Kynon -	{ Llangenor Mount. - - - 1568 The Garth - - - 1566 Mynydd Mane - - - 775 Dundry Beacon - - - 775 }	1567	
Ogmoor Down -			
Trecastle Beacon			
Llangenor Mount.			
The Garth -			
Mynydd Mane -			
Dundry Beacon -			

The altitude of Dundry Beacon, as formerly computed, was said to be 790 feet, which differs 15 feet from the above determination.

The Height of,	As deduced from,	Feet, Mean Weighth,
The Cradle Mount	Mynydd Mane -	2545
Trelleg Beacon -	{ The Cradle Mountain	1012
	{ Mynydd Mane -	1010
May Hill -	Trelleg Beacon -	966
Malvern Hills	May Hill -	1444
Cleve Hill -	May Hill -	1134
Broadway Beacon	{ Malvern Hill -	1086
	{ Cleve Hill -	1072
		1079

At page 715 of the Philosophical Transactions for the year 1800, it will be seen, that Broadway Beacon is 1086 feet above the level of the sea at low water, a conclusion drawn by applying the base of altitude at Maker Heights, near Plymouth, to the differences of altitude of the Stations between that place and Broadway Beacon. From the above result, 1079 feet appears to be the height of that Station above the surface of the sea at Milford Haven.

This article would be swelled to an unnecessary extent, were the mode pointed out by which the altitude of every Station has been computed. It will be sufficient to state that, in deriving the numbers expressing the heights, the several differences have been mingled together, and the means always taken. The altitudes of Broadway Beacon and Dundry Beacon is just found, compared with the heights as formerly derived, will convey an idea of the degree of accuracy attending this mode of deducing the heights.

The altitudes of the Stations along the boundaries of the triangles, as given in the papers heretofore published, compared with the altitudes of the same Stations, as found on this occasion, give results nearly similar with those derived from the different means of computing the altitudes of Broadway and Dundry Beacon.

The altitudes of most of the remarkable hills in England and Wales being now determined from the Trigonometrical Survey, and the alphabetical mode of arrangement appearing to be the most advantageous for the purpose of reference, it is hoped that the following list may prove acceptable to the public.

*An Alphabetical List of the Altitudes of the Stations, and several other remarkable Hills, computed from the Observations made in the course of the Trigonometrical Survey.*

	A.			Feet.
Aberystwith, <i>Cardiganshire</i>	-	-	-	496
Agnes (St.) Beacon, <i>Cornwall</i>	-	-	-	621
Ailington Knoll, <i>Kent</i>	-	-	-	329
Alnwick Moor, <i>Northumberland</i>	-	-	-	808
Ann's (St.) Heights, at the Mouth of Milford Haven, <i>Pembrokeshire</i>	-	-	-	235
Ann's (St.) Hill, <i>Surrey</i>	-	-	-	240
Arbury Hill, <i>Northamptonshire</i>	-	-	-	804
Arran Fowddy, <i>Merionethshire</i>	-	-	-	2955
Arrenig, <i>Merionethshire</i>	-	-	-	2809
Ash Beacon, <i>Somersetshire</i>	-	-	-	655
Ashley Heath, <i>Staffordshire</i>	-	-	-	803
Axedge, <i>Derbyshire</i>	-	-	-	1751

## B.

Bagshot Heath, <i>Surrey</i>	-	-	-	463
Banstead, <i>Surrey</i>	-	-	-	576
Bar Beacon, <i>Staffordshire</i>	-	-	-	653
Bardon Hill, <i>Leicestershire</i>	-	-	-	853
Barnaby Moor, <i>Yorkshire</i>	-	-	-	784
Beachy Head, <i>Sussex</i>	-	-	-	564
Beacons of Brecknock, <i>Brecknockshire</i>	-	-	-	2862
Beacon Hill, <i>Wiltshire</i>	-	-	-	690
Beeston Castle (Top of), <i>Cheshire</i>	-	-	-	556

				Fect.
Belle-field Hill, <i>Cheshire</i>	-	-	-	401
Beryl Hill, <i>Lancashire</i>	-	-	-	128
Billinge Beacon, <i>Lancashire</i>	-	-	-	633
Bindown, <i>Cornwall</i>	-	-	-	658
Black Comb, <i>Cumberland</i>	-	-	-	1919
Black Down, <i>Dorsetshire</i>	-	-	-	817
Black Hambleton Down, <i>Yorkshire</i>	-	-	-	1246
Blackheddon, <i>Northumberland</i>	-	-	-	646
Bleasdale Forest, <i>Lancashire</i>	-	-	-	1709
Bodmin Down, <i>Cornwall</i>	-	-	-	645
Boulsworth Hill, <i>Lancashire</i>	-	-	-	1689
Bolt Head, <i>Devonshire</i>	-	-	-	430
Botley Hill, <i>Surrey</i>	-	-	-	880
Botton Head, <i>Yorkshire</i>	-	-	-	1485
Bow Brickhill, <i>Buckinghamshire</i>	-	-	-	683
Bow Fell, <i>Cumberland</i>	-	-	-	2911
Bow Hill, <i>Sussex</i>	-	-	-	702
Bradfield Point, <i>Yorkshire</i>	-	-	-	1246
Bradley Knoll, <i>Somersetshire</i>	-	-	-	973
Brandon Mount, <i>Durham</i>	-	-	-	875
Brenin Fawr, <i>Pembrokeshire</i>	-	-	-	1985
Brightling Down, <i>Sussex</i>	-	-	-	640
Broadway Beacon, <i>Glostershire</i>	-	-	-	1086
Brown Clay Hill, <i>Shropshire</i>	-	-	-	1805
Brown Willy, <i>Cornwall</i>	-	-	-	1363
Bull Barrow, <i>Dorsetshire</i>	-	-	-	927
Burian (St.), <i>Cornwall</i>	-	-	-	415
Burleigh Moor, <i>Yorkshire</i>	-	-	-	553
Butser Hill, <i>Hampshire</i>	-	-	-	917
Butterton Hill, <i>Devonshire</i>	-	-	-	1203
Bwlch Mawr, <i>Caernarvonshire</i>	-	-	-	1673

## C.

				Feet.
Cader Ferwyn, <i>Merionethshire</i>	-	-	-	2563
Cader Idris, <i>Merionethshire</i>	-	-	-	2914
Cadon Barrow, <i>Cornwall</i>	-	-	-	1011
Caermarthen Van, or Trecastle Beacon, <i>Caermarthen</i>	-	-	-	2596
Calf Hill, <i>Westmoreland</i>	-	-	-	2188
Carn Fell, <i>Yorkshire</i>	-	-	-	2245
Capellante, <i>Brecknockshire</i>	-	-	-	2394
Capel Kynon, <i>Cardiganshire</i>	-	-	-	1046
Carnedd David, <i>Caernarvonshire</i>	-	-	-	3427
Carnedd Llewellyn, <i>Caernarvonshire</i>	-	-	-	3469
Carraton Hill, <i>Cornwall</i>	-	-	-	1208
Castle Ring, <i>Staffordshire</i>	-	-	-	715
Cawsand Beacon, <i>Devonshire</i>	-	-	-	1792
Cefn Bryn, <i>Glamorganshire</i>	-	-	-	583
Chanctonbury Hill, <i>Sussex</i>	-	-	-	814
Charton Common, <i>Dorsetshire</i>	-	-	-	582
Cheviot, <i>Northumberland</i>	-	-	-	2658
Clifton Beacon, <i>Yorkshire</i>	-	-	-	417
Cleave Down, <i>Glostershire</i>	-	-	-	1134
Collier Law, <i>Durham</i>	-	-	-	1678
Coniston Fell	-	-	-	2577
Corley, <i>Warwickshire</i>	-	-	-	521
Cradle Mountain, <i>Brecknockshire</i>	-	-	-	2545
Crif Fell, <i>Scotland</i>	-	-	-	1831
Cross Fell, <i>Cumberland</i>	-	-	-	2901
Crewborough Beacon, <i>Sussex</i>	-	-	-	804
Cyrn y Brain Mountain, <i>Denbighshire</i>	-	-	-	1857

D.

Fect.

Danby Beacon, <i>Yorkshire</i>	-	-	-	966
Deadman, <i>Cornwall</i>	-	-	-	379
Dean Hill, <i>Hampshire</i>	-	-	-	539
Dejamere Forest, <i>Cheshire</i>	-	-	-	596
Dent Hill, <i>Cumberland</i>	-	-	-	1115
Ditchling Beacon, <i>Sussex</i>	-	-	-	858
Dover Castle, <i>Kent</i>	-	-	-	459
Dumpton Hill, <i>Dorsetshire</i>	-	-	-	879
Dundon Beacon, <i>Somersetshire</i>	-	-	-	360
Dundry Beacon, <i>Somersetshire</i>	-	-	-	1668
Dunnose, <i>Isle of Wight</i>	-	-	-	792
Dunrigs, <i>Scotland</i>	-	-	-	2408
Dwggan, near Builth, <i>Brecknockshire</i>	-	-	-	2071

E.

Easington Heights, <i>Yorkshire</i>	-	-	-	681
Elden Hills, near Melrose, <i>Scotland</i>	-	-	-	1364
Epwell Hill, <i>Oxfordshire</i>	-	-	-	836

F.

Fairlight Down, <i>Sussex</i>	-	-	-	599
Farley Down (near Bath), <i>Glostershire</i>	-	-	-	700
Firle Beacon, <i>Sussex</i>	-	-	-	820
Folkstone Turnpike, <i>Kent</i>	-	-	-	575
Frant Steeple (Top), <i>Sussex</i>	-	-	-	659
Furland (near Dartmouth), <i>Devonshire</i>	-	-	-	589



## G.

Feet.

Garreg Mountain, <i>Flintshire</i>	-	-	-	835
Garth (The), <i>Glamorganshire</i>	-	-	-	981
Gerwyn Goch, <i>Caernarvonshire</i>	-	-	-	1723
Go Hill, <i>Lancashire</i>	-	-	-	304
Goudhurst, <i>Kent</i>	-	-	-	497
Grasmere Fell, <i>Cumberland</i>	-	-	-	2756
Greenwich Observatory, <i>Kent</i>	-	-	-	214
Gringley on the Hill, <i>Yorkshire</i>	-	-	-	235
Gwaunysgaer Down, <i>Denbighshire</i>	-	-	-	732

## H.

Haldon (Little), <i>Devonshire</i>	-	-	-	818
Hanger Hill (Tower), <i>Middlesex</i>	-	-	-	251
Hathersedge, <i>Derbyshire</i>	-	-	-	1377
Hawkeston Obelisk (Top of), <i>Shropshire</i>	-	-	-	812
Hedgehope, <i>Northumberland</i>	-	-	-	2347
Helvellin, <i>Cumberland</i>	-	-	-	3055
Hensbarrow Beacon, <i>Cornwall</i>	-	-	-	1034
Heswell Hill, <i>Cheshire</i>	-	-	-	475
Highbeeck, <i>Essex</i>	-	-	-	750
Highclere Beacon, <i>Hampshire</i>	-	-	-	900
Highgate Down, <i>Pembrokeshire</i>	-	-	-	294
High Nook (near Dymchurch), <i>Kent</i>	-	-	-	28
High Pike, <i>Cumberland</i>	-	-	-	2101
Hind Head, <i>Surrey</i>	-	-	-	923
Holland Hill, <i>Nottinghamshire</i>	-	-	-	487
Holme Moss, <i>Derbyshire</i>	-	-	-	1859
Hollingborn Hill, <i>Kent</i>	-	-	-	616

Holy Head Mountain, <i>Anglesea</i>	-	-	709
Hundred Acres, <i>Surrey</i>	-	-	448
Hunsley Beacon, <i>Yorkshire</i>	-	-	531

I.

Ingleborough Hill, <i>Yorkshire</i>	-	-	2361
Inkpin Beacon, <i>Hampshire</i>	-	-	1011

K.

Karnbonellis, <i>Cornwall</i>	-	-	822
Karnminnis, <i>Cornwall</i>	-	-	805
Kensworth, <i>Hertfordshire</i>	-	-	904
Kilhope Law	-	-	2196
King's Arbour, <i>Middlesex</i>	-	-	132
Kit Hill, <i>Cornwall</i>	-	-	1067

L.

Langdon Hill, <i>Essex</i>	-	-	620
Lansdown, <i>Somersetshire</i>	-	-	813
Largo Law, <i>Scotland</i>	-	-	952
Ledstone Beacon, <i>Yorkshire</i>	-	-	278
Leith Hill, <i>Surrey</i>	-	-	993
Lillyhoe, <i>Hertfordshire</i>	-	-	664
Llandinam Mountain, <i>Montgomeryshire</i>	-	-	1898
Llanelian Mountain, <i>Anglesea</i>	-	-	582
Llanelian Mountain, <i>Denbighshire</i>	-	-	1110
Llangeinor Mountain, <i>Glamorganshire</i>	-	-	1859
Llannon, <i>Cærmarthenshire</i>	-	-	912
Llwydiart Mountain, <i>Anglesea</i>	-	-	523
Lomond Hill (East), <i>Scotland</i>	-	-	1466
Lomond Hill (West), <i>Scotland</i>	-	-	1721

			Feet.
Long Mount Forest, <i>Shropshire</i>	-	-	1674
Long Mountain, <i>Montgomeryshire</i>	-	-	1330
Loosehoe, <i>Yorkshire</i>	-	-	1404
Lords Seat, <i>Derbyshire</i>	-	-	1751
Lumsdane Hill, <i>Scotland</i>	-	-	725

## M.

Maker Heights, <i>Cornwall</i>	-	-	402
Malvern Hill, <i>Worcestershire</i>	-	-	1444
Marros Beacon, <i>Caermarthenshire</i>	-	-	514
Margam Down, <i>Glamorganshire</i>	-	-	1099
May Hill, <i>Gloestershire</i>	-	-	965
Moel Faminau, <i>Denbighshire</i>	-	-	1845
Moelfre Issa, <i>Denbighshire</i>	-	-	1037
Moel Rhyddlad, <i>Anglesea</i>	-	-	465
Moor Lynch (Windmill), <i>Somersetshire</i>	-	-	330
Moel Morwith, <i>Denbighshire</i>	-	-	1767
Mordington Hill, <i>Scotland</i>	-	-	641
Motteston Down, <i>Hampshire</i>	-	-	698
Mow Copt, <i>Cheshire</i>	-	-	1091
Muzzle Hill (near Brill), <i>Buckinghamshire</i>	-	-	744

## N.

Nettlebed (Windmill), <i>Oxfordshire</i>	-	-	820
New Inn Hill, <i>Caermarthenshire</i>	-	-	1168
Newton Down, <i>Pembrokeshire</i>	-	-	322
Nine Barrow Down, <i>Dorsetshire</i>	-	-	642
Nine Standards, <i>Westmoreland</i>	-	-	2136
North Berule, <i>Isle of Man</i>	-	-	1804
Norwood, <i>Surrey</i>	-	-	389
Nuffield Common, <i>Berkshire</i>	-	-	757

## O.

Feet.

Ogmoor Down, <i>Glamorganshire</i>	-	-	-	292
Orpit Heights, <i>Derbyshire</i>	-	-	-	980

## P.

Paddlesworth, <i>Kent</i>	-	-	-	642
Pendle Hill, <i>Lancashire</i>	-	-	-	1803
Pengarn, <i>Merionethshire</i>	-	-	-	1510
Penmaen Mawr, <i>Caernarvonshire</i>	-	-	-	1540
Pennigant Hill, <i>Yorkshire</i>	-	-	-	2270
Portinney, <i>Cornwall</i>	-	-	-	689
Pillar, <i>Cumberland</i>	-	-	-	2893
Pilsdon Hill, <i>Dorsetshire</i>	-	-	-	934
Plumstone Down, <i>Pembrokeshire</i>	-	-	-	573
Plynlimmon Mountain, <i>Cardiganshire</i>	-	-	-	2463
Pontop Pike, <i>Durham</i>	-	-	-	1018
Portsdown Hill, <i>Hampshire</i>	-	-	-	447
Precelly Top, <i>Pembrokeshire</i>	-	-	-	1751

## Q.

Queensberry Hill, <i>Scotland</i>	-	-	-	2259
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## R.

Radnor Forest, <i>Radnorshire</i>	-	-	-	2163
Rhiw Mountain, <i>Caernarvonshire</i>	-	-	-	1013
Rippin Tor. (Dartmoor), <i>Devonshire</i>	-	-	-	1549
Rivel Mountain, <i>Caernarvonshire</i>	-	-	-	1866
Rivington Hill, <i>Lancashire</i>	-	-	-	1545
Rodney's Pillar (Base of), <i>Montgomeryshire</i>	-	-	-	1199
Rooks Hill, <i>Sussex</i>	-	-	-	702

				Feet
Roseberry Topping, <i>Yorkshire</i>	-	-	-	1022
Ruckinge, <i>Sussex</i>	-	-	-	37
Rufflaw, <i>Northumberland</i>	-	-	-	595
Rumbles Moor, <i>Yorkshire</i>	-	-	-	1308
	S.			.
Saddleback, <i>Cumberland</i>	-	.	-	2787
Sarum (Old), <i>Wiltshire</i>	-	-	-	339
Sayrs Law, <i>Scotland</i>	-	-	-	1739
Sca Fell (Low Point), <i>Cumberland</i>		.	-	3092
Sca Fell (High Point), <i>Cumberland</i>		-	-	3166
Scilly Bank, <i>Cumberland</i>	-		-	500
Scutchamfly Beacon, <i>Berkshire</i>	-		-	853
Sennen, <i>Cornwall</i>	-	-	-	387
Sherwood Forest, <i>Nottinghamshire</i>		-	-	600
Shooters Hill, <i>Kent</i>	-	-	-	446
Shotover Hill, <i>Oxfordshire</i>	-	-	-	599
Shunnor Fell, <i>Yorkshire</i>	-	-	-	2329
Simonside Hill, <i>Northumberland</i>	-		-	1407
Skiddaw, <i>Cumberland</i>	-	-	-	3022
Snea Fell, <i>Isle of Man</i>	-	-	-	2004
Snowdon, <i>Caernarvonshire</i>	-		-	3571
Soutra Hill, <i>Scotland</i>	-	-	-	1716
Staincross Heights, <i>Yorkshire</i>	-	.	-	514
Stathern Point, <i>Leicestershire</i>	-	.	-	490
Stockbridge Hill, <i>Hampshire</i>	-		-	620
St. Stephen's Down, <i>Cornwall</i>	-		-	605
Stow Hill, <i>Herefordshire</i>	-	-	-	1417
Stow on the Wold, <i>Glostershire</i>		-		883
Swingfield Steeple (Top), <i>Kent</i>	-	.	-	530
Symmonds Hill, <i>Glostershire</i>	-	.	-	795

T.

Fect.

Talsarn, <i>Cardiganshire</i>	-	-	-	1143
Tenterden Steeple, <i>Kent</i>	-	-	-	322
Thorney Down, <i>Somersetshire</i>	-	-	-	610
Tregarron Down, <i>Cardiganshire</i>	-	-	-	1747
Trelleg Beacon, <i>Monmouthshire</i>	-	-	-	1011
Trevose Head, <i>Cornwall</i>	-	-	-	274

W.

Water Crag, <i>Yorkshire</i>	-	-	-	2186
Weaver Hill, <i>Staffordshire</i>	-	-	-	1154
Wendover Down, <i>Buckinghamshire</i>	-	-	-	905
Westbury Down, <i>Wiltshire</i>	-	-	-	775
Whernside (in Ingleton Fells), <i>Yorkshire</i>	-	-	-	2384
Whernside (in Kettlewell Dale), <i>Yorkshire</i>	-	-	-	2263
Whin Fell, <i>Scotland</i>	-	-	-	2241
White Horse Hill, <i>Berkshire</i>	-	-	-	893
Whiteham Hill, <i>Berkshire</i>	-	-	-	576
Wilton Beacon, <i>Yorkshire</i>	-	-	-	809
Wingreen Hill, <i>Dorsetshire</i>	-	-	-	941
Wisp Hill, <i>Scotland</i>	-	-	-	1940
Wittle Hill, <i>Lancashire</i>	-	-	-	1614
Wordslow Hill, <i>Durham</i>	-	-	-	632
Wrekin, <i>Shropshire</i>	-	-	-	1320

Y.

Ynaliog Mountain, <i>Caernarvonshire</i>	-	-	-	584
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## SECTION FIFTH.

ART. 1. *Observations made at Delamere Forest to determine the Zenith Distance of  $\beta$  Draconis.*Point on the Limb  $0^{\circ} 45'$  South.

Day of the Month.	Face of the Arch, W. or E.	Plumb Line.	Observation of the Star.	Zenith Distance in Revolutions and Parts.	Zenith Distance reduced.	Barometer.	Thermometer.
1806		rev. div.	rev. div.	o / rev. div.	o /		Above Water.
May 30	W.	9 30,1	8 7,07	0 45 1 23,03	0 46 22,37	29,37	49,5 50
June 4	W.	15 14,7	13 51,73	21,97	21,10	29,90	48 49
5	E.	6 16,4	7 42,0	25,60	24,74	29,17	51 51
6	W.	10 22,0	9 0,95	21,05	20,18	29,	51,5 53
7	W.	11 46,8	10 25,65	21,15	20,28	29,58	51,5 54,5
9	E.	6 48,3	8 14,53	25,23	24,37	29,67	62 63

*Observed Zenith Distance of  $\gamma$  Draconis.*Point on the Limb  $1^{\circ} 40'$  South.

May 30	W.	10 14,2	7 49,82	1 40 2 23,38	1 42 21,61	29,37	49,5 50
June 2	E.	4 45,3	7 14,10	27,80	26,04	29,67	51 51,5
4	W.	9 49,1	7 29,0	20,10	18,33	28,96	48 49
5	E.	4 39,4	7 5,0	24,60	22,84	29,17	51,5 51
7	W.	13 6,6	10 44,73	20,87	19,01	29,55	51,5 51,5
9	E.	5 20,9	7 44,68	23,78	22,01	29,67	62 63

*Observed Zenith Distance of  $\delta$  Draconis.*Point on the Limb  $3^{\circ} 45'$  North.

June 2	E.	2 37,0	7 9,57	3 45 4 31,57	3 40 31,98	29,64	50,5 51,5
4	W.	6 45,6	7 25,7	40 0 39,10	39,16	29,0	47,5 48
7	W.	8 12,6	8 50,48	37,88	37,94	29,56	51 52
9	E.	3 4,5	7 31,22	45 4 26,70	36,84	29,67	62 63

*Observed Zenith Distance of  $\epsilon$  Draconis.*Point on the Limb  $2^{\circ} 10'$  North.

June 2	E. E.	4 22,5	7 5,05	2 10 2 41,55	2 7 22,28	29,64	50,5 51,5
4	W. W.	9 50,1	7 13,63	36,47	25,27	29,0	47,0 48
7	W. W.	11 16,8	8 39,61	36,19	25,50	29,56	51 52
9	E. E.	4 36,6	7 11,95	34,35	27,48	29,66	61,5 62,5

*Observed Zenith Distance of  $\gamma$  Draconis.*

Point on the Limb  $0^{\circ} 5'$  South.

Day of the Month.	Face of the Arch, W. or E.	Plumb Line.	Observation of the Star.	Zenith Distance in Revolutions and Parts.	Zenith Distance reduced.	Barometer.	Thermometer.	
1806		rev. div.	rev. div.	0 5   rev. div.	0 7 8,18	29,56	Above.	Below.
June 7	W.	15 44,0	13 34,03	0 5   2 9,97	11,75	29,66	51,5	52,5
9	E.	4 56,5	7 11,03				61	62

*Observed Zenith Distance of  $\mu$  Draconis.*

Point on the Limb  $1^{\circ} 30'$  North.

June 2	E.	2 39,2	7 20,47	1 35   4 40,27	1 30 23,27	29,67	52,5	52
4	W.	7 32,6	7 57,95	30   0 25,35	25,39	28,97	48	48,5
6	W.	8 14,0	8 39,97		25,97	29,33	50,5	51,5
7	E.	8 43,5	8 18,82		24,68	29,68	62	63,5

*Observed Zenith Distance of  $\eta$  Draconis.*

Point on the Limb  $0^{\circ} 10'$  North.

May 30	W.	12 32,7	8 15,13	0 10   4 17,57	0 5 46,03	29,37	49,5	51,5
June 4	E.	8 34,6	7 48,95	5   0 44,65	44,72	28,97	48	48,5
6	W.	7 24,2	8 13,52		48,32	29,33	50,5	51,5

*Observed Zenith Distance of  $\iota$  Draconis.*

Point on the Limb  $6^{\circ} 25'$  North.

May 31	E.	9 12,0	8 44,44	0 25   0 26,56	6 25 26,61	29,44	49	50
June 1	W.	7 38,0	8 9,55		30,05	29,54	50,5	50,5
4	W.	6 46,1	7 21,8		34,70	29,00	48	48,5
5	E.	8 45,5	8 12,4		33,10	29,17	54,5	52
6	W.	7 49,1	8 26,3		35,90	29,33	51	51,5
7	E.	9 39,6	9 9,7		29,90	29,69	67,5	68,5

*Observed Zenith Distance of  $\zeta$  Draconis.*

Point on the Limb  $3^{\circ} 20'$  North.

June 2	E.	6 52,6	7 25,05	3 20   0 31,45	3 19 28,50	29,64	50,5	51,5
4	W.	7 56,3	6 31,57		24,73	29,00	46,5	48
7	W.	14 42,0	13 13,48		28,52	29,58	51	52
9	E.	5 52,6	7 25,33		31,73	29,66	61	62



### Observed Zenith Distance of $\alpha$ Cygni.

Point on the Limb  $0^{\circ} 15'$  South.

Day of the Month.	Face of the Arch, W. or E.	Plumb Line.	Observation of the Star.	Zenith Distance in Revolutions and Parts.		Zenith Distance reduced.	Barometer.	Thermometer.	
				•	rev. div.			Above.	Below.
1806		rev. div.	rev. div.	•	rev. div.				
June 2	E.	9 26,6	6 52,71	0 15	2 32,89	12 28,46	29,63	50	52
4	W.	5 22,1	7 57,71		35,60	26,14	29,0	46,5	48
7	W.	10 53,5	13 29,75		35,25	26,49	29,56	51,5	52,5
9	E.	4 54,9	7 26,2		30,30	31,45	29,66	61	62

### Observed Zenith Distance of $10$ Cygni.

Point on the Limb  $1^{\circ} 55'$  South.

June 2	E.	4 41,0	8 50,18	1 50	4 10,08	1 54 6,49	29,63	50	52
4	W.	7 31,4	8 28,6	55	0 66,20	3,71	29,0	46,5	48
7	W.	17 57,0	13 51,3	50	4 5,70	2,10	29,56	51,5	52,5
9	E.	7 58,2	7 4,77	55	0 53,43	6,98	29,66	61	62

### Observed Zenith Distance of $\gamma$ Ursæ.

Point on the Limb  $1^{\circ} 30'$  North.

May 31	E.	9 24,8	6 20,87	1 30	3 3,93	1 33 1,23	29,45	55	58
June 1	W.	5 2,5	8 12,63		10,13	7,44	29,45	59,5	59,5
6	E.	11 22,8	8 16,42		6,38	3,68	29,26	59	58,5
9	W.	10 26,8	13 36,0		9,20	6,51	29,7	79	73,5

### Observed Zenith Distance of $\eta$ Ursæ.

Point on the Limb  $2^{\circ} 55'$  South.

May 31	E.	7 13,5	28,52	2 55	1 14,98	56 14,10	29,44	50,5	50,5
June 1	W.	9 21,3	13,62		7,68	6,79	29,54	50,5	52,5
2	E.	1 37,1	7 57,66	50	6 20,56	15,19	29,68	52	54
3	W.	8 42,5	7 35,15	55	1 7,35	6,46	29,53	53	53,5
4	W.	14 31,9	8 20,32	50	6 11,58	6,19	28,93	48,5	49,5
6	E.	7 18,1	8 33,38	55	1 15,28	14,34	29,32	53	54,5
7	W.	11 2,9	9 51,33		9,57	8,68	29,58	55	57
9	E.	8 8,0	9 22,95		14,95	14,07	29,69	67	68

*Observed Zenith Distance of  $\zeta$  Ursæ.*

Point on the Limb  $2^{\circ} 45'$  North.

Day of the Month.	Face of the Arch, W. or E.	Plumb Line.	Observation of the Star.	Zenith Distance in Revolutions and Parts.			Zenith Distance reduced.	Barometer.	Thermometer.	
1806		rev. div.	rev. div.	0	rev. div.				Above.	Below.
May 31	E.	4 24,6	6 22,23	2 45	1 56,63	2 43	4,18	29,44	50	53
June 1	W.	10 5,6	8 15,62		48,98		11,43	29,54	59,5	59,5
2	E.	1 44,7	3 41,05		55,35		5,46	29,68	52	54
3	E.	6 26,0	8 23,45		56,45		4,36	29,53	53	53,5
4	W.	10 11,2	8 20,57		49,63		11,15	28,93	50	50,5
5	W.	9 0,9	7 13,07		46,83		14,00	29,17	51,5	52
6	E.	6 32,2	8 28,35		55,15		5,26	29,32	53	54,5
7	W.	11 44,7	9 53,72		49,98		10,83	29,58	55	57
9	E.	7 10,0	9 4,9		53,90		6,91	29,69	67	68

*Observed Zenith Distance of  $\delta_5$  Herculis.*

Point on the Limb  $7^{\circ} 5'$  South.

June 4	W.	15 12,8	13 50,74	7 5	1 21,06	7 6	20,19	28,96	48	49
5	E.	5 47 0	7 15,0		27,00		26,14	29,17	51	51
9	E.	6 37,6	8 4,53		25,93		25,07	25,93	62	63

*Observed Zenith Distance of  $\nu$  Herculis.*

Point on the Limb  $6^{\circ} 35'$  South.

May 30	W.	10 9,0	6 39,48	35	28,52	6 38	25,86	29,36	49,5	51,5
June 2	E.	4 32,7	3,5		29,80		27,14	29,67	49,5	51,5
4	W.	11 4,4	35,98		27,42		24,76	29,0	52	54
5	E.	4 23,9	54,97		31,07		28,41	29,17	48	48,5
6	W.	11 54,0	23,52		24,48		21,88	29,33	51,5	52
7	E.	6 36,4	9,38		31,98		29,39	29,58	50,5	51,5
9	E.	5 26,8	8 56,45		29,65		26,99	29,68	62	63,5

*Observed Zenith Distance of  $\tau$  Herculis.*

Point on the Limb  $6^{\circ} 25'$  South.

May 30	W.	9 11,3	7 44,9	25,40	6 26	24,54	29,36	49,5	51,5
June 4	E.	6 22,8	7 55,22	32,42		31,57	28,97	48	48,5
6	W.	9 51,4	8 28,05	23,35		22,49	29,33	50,5	50,5

*Observations made at Burleigh Moor, to determine the Zenith Distance of  $\beta$  Draconis.*

Point on the Limb  $2^{\circ} 5'$  South.

Day of the Month.	Face of the Arch. W. or E.	Plumb Line.	Observation of the Star.	Zenith Distance Revolutions and Parts.		Zenith Distance reduced.	Barometer.	Thermometer.	
1806		rev. div.	rev. div.	°	rev. div.	°		Above.	Below.
July 6	W.	14 32,9	12 20,17	2 5	2 12,73	2 7 10,95	29,25	51	51
7	E.	8 13,4	10 29,25		15,85	14,07	28,95	54,5	54,5
9	E.	5 40,5	8 1,93		20,43	18,66	29,55	59	57,5
10	E.	5 58,0	8 12,20		13,20	11,42	29,59	65	62
11	W.	9 56,6	7 49,6		7,00	5,21	29,29	55	56,5
16	W.	9 47,2	7 39,40		7,80	5,29	29,1	51,5	51,5
18	W.	10 24,5	8 18,08		6,42	4,63	29,25	59	56
19	E.	5 47,1	8 3,91		15,81	14,03	29,35	56	56,5

*Observed Zenith Distance of  $\gamma$  Draconis.*

Point on the Limb  $3^{\circ} 5'$  South.

July 6	W.	9 11,5	11 14,9	3 5	2 3,40	3 2 46,40	29,25	51	51
7	E.	11 19,9	10 34,47		1 46,43	3 14,47	28,95	54,5	54,5
10	E.	10 16,0	8 25,8		49,20	11,22	29,59	65	62,5
11	W.	5 47,3	7 43,92		55,62	5,18	29,29	56,5	55
16	W.	5 7,5	7 4,24		55,74	5,07	29,1	51,5	51,5
18	W.	6 1,5	7 55,13		53,63	6,18	29,25	59	56
19	E.	9 36,6	7 46,61		48,99	11,83	29,36	56,5	55

*Observed Zenith Distance of  $\delta$  Draconis.*

Point on the Limb  $2^{\circ} 20'$  North.

July 7	E.	10 34,9	10 51,25	2 20	16,55	19 43,42	28,95	54,5	54,5
9	E.	7 47,0	8 2,91		14,91	45,07	29,53	57	54
10	E.	8 31,1	8 43,10		12,0	47,98	29,59	65	62
16	W.	7 9,5	7 3,26		6,24	53,75	29,0	50	51

*Observed Zenith Distance of  $\epsilon$  Draconis.*

Point on the Limb  $0^{\circ} 45'$  North.

July 7	E.	12 34,0	11 2,80	0 45	1 31,20	0 46 30,25	28,95	54,5	54,5
9	E.	9 26,2	7 52,21		32,99	32,14	29,53	57	54
10	E.	9 50,9	8 16,26		34,64	33,79	29,59	64,5	62
11	W.	5 16,1	6 55,57		39,47	39,63	29,25	56,5	56,5
16	W.	5 23,0	7 6,40		42,40	41,57	29,0	50	51

Observed Zenith Distance of 51 Draconis.

Point on the Limb  $1^{\circ} 30'$  South.

Day of the Month.	Face of the Arch W. or E.	Plumb Line.	Observation of the Star.	Zenith Distance in Revolutions and Parts.		Zenith Distance reduced.	Barometer.	Thermometer.	
				o	rev. div.			Above.	Below.
1806		rev. div.	rev. div.	o	rev. div.	o			
July 9	E.	10 0,0	7 58,27	1 30	2 0,73	1 28 1,07	29,53	57	54
10	E.	10 25,0	8 22,50		2,50	0,70	29,59	65	52
11	W.	5 13,0	7 17,55		4,55	27 59,30	29,25	55,5	55
16	W.	4 52,5	7 1,52		8,02	53,77	29,2	51	51,5
19	E.	9 44,4	7 40,50		3,90	57,90	29,36	56	56

Observed Zenith Distance of 17 Draconis.

Point on the Limb  $1^{\circ} 15'$  South.

July 4	W.	11 32,5	11 29,9	1 15	0 2,60	1 15 2,61			
6	W.	11 24,5	11 20,59		3,91	3,92	29,25	51,5	51
7	E.	10 15,5	10 23,75		8,25	8,26	28,95	54,5	54,5
9	E.	8 27,8	8 34,73		6,93	6,96	29,52	61	58
10	E.	8 1,0	8 8,35		7,35	7,36	29,32	66,5	66,5
11	W.	8 20,6	8 20,48		0,12	0,12	29,29	59	56
12	E.	7 50,1	7 56,22		6,12	6,13	29,38	60	59
16	W.	7 33,1	7 35,57		2,47	2,47	29,0	54	54

Observed Zenith Distance of 12 Draconis.

Point on the Limb  $5^{\circ} 5'$  North.

July 9	E.	8 27,5	8 51,0	5 5	0 23,50	5 4 36,46	29,52	61	58
10	E.	8 51,5	9 2,8		10,30	49,68	29,32	66,5	66,5
16	W.	7 29,6	7 12,45		16,15	43,82	29,35	56	56,5

Observed Zenith Distance of 53 Draconis.

Point on the Limb  $2^{\circ} 0'$  North.

July 7	E.	13 35,4	10 51,73	1 55	+2 42,67	1 57 40,93	28,95	54,5	54,5
9	E.	5 58,9	8 26,45	2 0	-2 26,55	35,21	29,53	57	54
10	E.	6 28,2	8 47,11		18,91	42,86	29,59	65	62
11	W.	9 36,5	7 19,0		17,50	42,27	29,25	55,5	55
16	W.	9 9,0	6 54,47		13,53	48,25	29,2	51	51

Observed Zenith Distance of  $\mu$  Draconis.Point on the Limb  $0^{\circ} 10'$  North.

Day of the Month.	Face of the Arch. W. or E.	Plumb Line.	Observation of the Star.	Zenith Distance in Revolutions and Parts.		Zenith Distance reduced.	Barometer.	Thermometer.	
1806		rev. div.	rev. div.	0	rev. div.	0		Above.	Below.
July 7	E.	13 55.5	9 20.72	0 5	4 34.78	0 9 30.23	28.05	54.5	54.5
9	E.	7 57.5	8 27.22		28.72	29.31	29.52	61.5	58
10	E.	7 48.9	8 17.87		27.97	31.98	29.59	64.5	62
11	W.	8 26.4	8 5.53		20.87	39.10	29.29	59	56
16	W.	7 32.5	7 12.75		19.75	40.22	29.1	52	52

Observed Zenith Distance of  $1 \kappa$  Cygni.Point on the Limb  $1^{\circ} 35'$  South.

July 9	E.	10 16.8	8 34.17	1 35	1 41.63	1 33 19.20	29.53	57	54.5
10	E.	10 39.4	8 57.13		48.27	18.56	29.59	65	62.5
11	W.	6 7.5	7 53.29		45.70	15.13	29.25	55.5	55
16	W.	5 22.4	7 13.0		49.60	11.32	29.20	51	51

Observed Zenith Distance of  $10 \iota$  Cygni.Point on the Limb  $3^{\circ} 15'$  South.

July 6	W.	10 25.8	10 33.83	3 15	0 8.03	3 14 51.96	29.26	49.5	49.5
9	E.	8 22.4	8 18.50		3.90	56.09	29.53	57	54
10	E.	9 28.3	9 21.41		6.89	53.10	29.59	65	62
11	W.	7 40.2	7 48.50		8.30	51.70	29.25	55.5	55.5
16	W.	6 49.4	7 34.3		12.03	46.94	29.20	51	51

Observed Zenith Distance of  $\alpha$  Persei.Point on the Limb  $5^{\circ} 25'$  South.

July 14	W.	7 31.5	7 49.13	5 25	0 17.63	5 24 42.34	29.0	65	62
15	W.	6 53.0	7 12.55		18.55	41.42	29.20	64	60
19	E.	6 24.6	6 9.55		15.05	44.92	29.31	64.5	62.5

*Observed Zenith Distance of  $\alpha$  Cassiopeia.*

Point on the Limb  $5^{\circ} 5'$  North.

Day of the Month.	Face of the Arch W. or E	Plumb Line.	Observation of the Star.	Zenith Distance in Revolutions and Parts.	Zenith Distance reduced.	Barometer.	Thermometer:	
1806							Above.	Below:
July 15	W.	rev. div. 6 39,8	rev. div. 7 9,3	5 5 3	28,50	29,16	58	55
17	W.	7 38,8	7 11,48		23,32	27,36	53	53,5
19	W.	5 10,1	5 44,77		34,67	34,73	54	55,5

*Observed Zenith Distance of  $\alpha$  Cassiopeia.*

Point on the Limb  $2^{\circ} 15'$  North.

July 15	W.	9 42,3	7 24,43	2 15	2 17,87	2 12 43,00	29,16	58	55
17	W.	5 16,0	7 33,91		17,90	43,86	29,06	53	53,5
19	W.	8 27,4	6 5,17		22,83	39,45	29,26	54	55,5

ART. II. *Reduction of the Observations made on certain Stars at Delamere Forest, in Cheshire, and Burleigh Moor, near the Tees Mouth, in Yorkshire, from the respective Days on which they were made, to the first of January 1806; the Equations being those for Aberration, Nutation, semi-annual solar Equation, Precession, and Refraction, with the Zenith Distances of the Stars deduced therefrom.*

*Reduction of the Observations made at Delamere Forest.*

*$\gamma$  Draconis, South.*

Face of the Limb West.	Face of the Limb East.	Zenith dist.	
May 30—1° 2' 14,75	June 2—1° 42' 20,07	1° 42' 16,42 (refr. &c.)	1° 42' 18,07
June 4 13,08	5 17,79	+1,672	Mean refr.
7 14,60	9 18,25	—0,034	Temperature.
Mean 1 42 14,14	Mean 1 42 18,70	+0,031	Expansion of axis.
			<hr/>
		1 42	18,09

*$\beta$  Draconis, South.*

		Zenith dist.	
May 30—0° 46' 15,84	June 5—0° 46' 20,09	0° 46' 18,3 (refr. &c.)	0° 46' 19,036.
4 16,17	9 21,02		
6 15,89			
7 16,30			
Mean 0 46 16,05	Mean 0 46 20,55		

*$\delta$  Draconis, North.*

		Zenith dist.	
June 4—3° 40' 44,28	June 2—3° 40' 38,72	3° 40' 40,9 (refr. &c.)	3° 40' 44,78.
7 41,36	9 39,27		
Mean 3 40 42,82	Mean 3 40 38,99		

*$\epsilon$  Draconis, North.*

		Zenith dist.	
June 4—2° 7' 30,78	June 2—2° 7' 16,10	2° 7' 29,27 (refr. &c.)	2° 7' 31,34.
7 29,46	9 30,74		
Mean 2 7 30,12	Mean 2 7 28,42		

*$\zeta$  Draconis, South.*

		Zenith dist.	
June 7—0° 7' 4,33	June 9—0° 7' 8,56	0° 7' 6,4 (refr. &c.)	0° 7' 6,48.

$\mu$  *Draconis North.*

Face of the Limb West.	Face of the Limb East.	
June 4—1° 30' 23",70	June 2—1° 30' 22",30	Zenith dist. 1° 30' 28",83 (refr. &c.) 1° 30' 24",29.
6 23,75	9 21,60	
Mean 1 30 23,74	Mean 1 30 21,95	

17 *Draconis, North.*

May 30—0° 5' 52",32	June 4—0° 5' 49",56	Zenith dist. 0° 5' 50",98 (refr. &c.) 0° 5' 51",08.
6 52,49		
Mean 0 5 52,40		

1  $\kappa$  *Cygni, South.*

June 4—0° 12' 21",63	June 2—0° 12' 23",38	Zenith dist. 0° 12' 24",32 (refr. &c.) 0° 12' 24",51.
7 23,79	9 28,53	
Mean 0 12 22,7	Mean 0 12 25,95	

10  $\iota$  *Cygni, North.*

June 4—1° 53' 59",12	June 2—1° 54' 1",16	Zenith dist. 1° 54' 0",55 (refr. &c.) 1° 54' 2",216.
7 58,17	9 3,95	
Mean 1 53 58,64	Mean 1 54 2,56	

$\gamma$  *Ursæ, North.*

June 1—1° 33' 8",25	May 31—1° 33' 2",18	Zenith dist. 1° 33' 5",42 (refr. &c.) 1° 33' 6",93.
9 6,99	6 4,28	
Mean 1 33 7,62	Mean 1 33 3,23	

79  $\zeta$  *Ursæ, North.*

June 1—2° 43' 13",63	May 31—2° 43' 6",76	Zenith dist. 2° 43' 10",51 (refr. &c.) 2° 43' 13",34.
4 13,18	June 2 7,83	
5 15,91	4 6,52	
7 12,35	6 6,98	
	9 8,21	
Mean 2 43 13,77	Mean 2 43 7,25	

$\eta$  *Ursæ, South.*

June 1—2° 56' 2",85	May 31—2° 56' 9",24	Zenith dist. 2° 56' 7",13 (refr. &c.) 2° 56' 9",96.
3 2,72	June 2 11,33	
4 2,71	6 11,24	
7 5,78	9 11,23	
Mean 2 56 3,51	Mean 2 56 10,76	

85  $\epsilon$  *Herculis.*

June 4—7° 6' 15",58	June 5—7° 6' 23",09	Zenith dist. 7° 6' 19",03 (refr. &c.) 7° 6' 25",89.
	9 21,90	
	Mean 7 6 22,49	

T t



*υ Herculis, South.*

Face of the Limb West.		Face of the Limb East.		Zenith dist. $6^{\circ} 38' 18''.74$ (refr. &c.) $6^{\circ} 38' 25''.14$ .
May	$30-6^{\circ} 38' 16''.75$	June	$2-6^{\circ} 38' 19''.01$	
June	4 17.46		5 21.36	
	6 15.03		7 22.95	
			9 21.05	
Mean	6 38 16.41	Mean	6 38 21.09	

*22 τ Herculis.*

May	$30-6^{\circ} 26' 18''.35$	June	$4-6^{\circ} 26' 26''.84$	Zenith dist. $6^{\circ} 26' 22''.56$ (refr. &c.) $6^{\circ} 26' 28''.78$ .
	18.23			
Mean	6 26 18.29			

*Reduction of the Observations made at Burleigh Moor.**γ Draconis.*

July	$11-3^{\circ} 3' 11''.71$	July	$7-3^{\circ} 3' 19''.83$	Zenith dist. $3^{\circ} 3' 16''.03$ (refr. &c.) $3^{\circ} 3' 19''.09$ .
	16 12.99		10 17.13	
	18 14.74		19 19.82	
Mean	3 3 13.15	Mean	3 3 18.92	

*β Draconis.*

July	$6-2^{\circ} 7' 16''.14$	July	$7-2^{\circ} 7' 19''.55$	Zenith dist. $2^{\circ} 7' 17''.37$ (refr. &c.) $2^{\circ} 7' 18''.5$ .
	11 11.79		9 24.69	
	16 13.17		10 17.20	
	18 15.04		19 22.08	
Mean	2 7 13.71	Mean	2 7 20.88	

*45 d Draconis.*

July	$16-2^{\circ} 19' 44''.78$	July	$7-2^{\circ} 19' 37''.45$	Zenith dist. $2^{\circ} 19' 41''.71$ (refr. &c.) $2^{\circ} 19' 43''.96$ .
			9 38.47	
			10 40.03	
		Mean	2 19 38.65	

*46 c Draconis.*

July	$11-0^{\circ} 46' 32''.20$	July	$7-0^{\circ} 46' 24''.22$	Zenith dist. $0^{\circ} 46' 28''.9$ (refr. &c.) $0^{\circ} 46' 29''.69$ .
	16 32.44		9 25.45	
			10 26.78	
Mean	0 46 32.32	Mean	0 46 25.48	

*51 Draconis, South.*

July	$11-1^{\circ} 28' 4''.881$	July	$9-1^{\circ} 28' 7''.83$	Zenith dist. $1^{\circ} 28' 5''.80$ (refr. &c.) $1^{\circ} 28' 7''.15$ .
	16 3.12		10 7.83	
			19 7.17	
Mean	1 28 4.00	Mean	1 28 7.61	

17 *Draconis*, *South*.

Face of the Limb West.			Face of the Limb East.			Zenith dist. $1^{\circ} 15' 9''.79$ (refr. &c.) $1^{\circ} 15' 11''.04$ .
July			July			
	4— $1^{\circ} 15'$	6'',24		7— $1^{\circ} 15'$	12'',91	
	6	7,33		9	12,08	
	11	5,79		10	12,79	
	16	9,24		12	11,96	
Mean	4 15	7,15	Mean	1 15	12,44	

23  $\mu$  *Draconis*.

July	11— $0^{\circ} 9'$	29'',31		0 9	21,89	Zenith dist. $0^{\circ} 9' 25''.53$ (refr. &c.) $0^{\circ} 9' 25''.42$ .
	16	28,66			21,47	
Mean	0 9	28,98	Mean	0 9	21,68	

1  $\alpha$  *Cygni*.

July	11— $1^{\circ} 33'$	26'',52	July	9— $1^{\circ} 33'$	26,50	Zenith dist. $1^{\circ} 33' 24,31$ (refr. &c.) $1^{\circ} 33' 25'',87$ .
	16	21,05		10	26,21	
Mean	1 33	22,28	Mean	1 33	26,36	

ART III. *Amplitudes of the Celestial Arc comprehended by the Stations on Dunnose and Burleigh Moor, near the Mouth of the Tees.*

THE several observations in the preceding article, are reduced to the first day of January, 1806: Those made on Dunnose in 1802, are reduced to the beginning of the same year, and must be brought up to the same period. For the Zenith Distances of those Stars at that Station, see the Account of the Measurement of an Arc of the Meridian, p. 90.

$\beta$ .	<i>Draconis</i>	-	1 49 53,38	North from the Zenith.
$\gamma$ .	————	-	0 53 53,83	N.
45 d.	————	-	6 16 58,18	N.
46 c.	————	-	4 43 42,44	N.

51	Draconis	-	2° 29' 4,"69 N.
17	————	-	2 42 3,18 N.
$\mu$	————	-	4 6 38,97 N.
1 $\times$	Cygni	-	2 23 47,81 N.
10 $\iota$	——	-	0 42 9,64 N.

At Burleigh Moor the Zenith distances of the same stars for the same period are

$\beta$	Draconis	-	2° 7' 18",51 South.
$\gamma$	————	-	3 3 19,09 S.
45 <i>d.</i>	————	-	2 19 43,96 North.
46 <i>c.</i>	————	-	0 46 29,69 N.
51 $\cdot$	————	-	1 28 7,15 S.
17	————	-	1 15 11,04 S.
$\mu$	————	-	0 9 25,48 N.
1 $\times$	Cygni*	-	1 33 25,87 S.

The amplitudes of the arc resulting from these determinations are as follow : viz.

By $\beta$	Draconis	-	3° 57' 11",89
$\gamma$	————	-	12,92
45 <i>d.</i>	————	-	14,22
46 <i>c.</i>	————	-	12,75
51 $\cdot$	————	-	11,84
17	————	-	14,22
$\mu$	————	-	13,49
1 $\times$	Cygni	-	13,68

The mean of which gives 3° 57' 13",1, being the difference of latitude between the parallels of Dunnose and Burleigh Moor.

ART. IV. *Amplitudes of the Celestial Arc comprehended by the Stations Dunnose and Delamere Forest.*

At Delamere Forest, the Zenith Distances of certain principal Stars are as follows : viz.

$\gamma$	Draconis	-	$1^{\circ} 42' 18,07$	South.
$\beta$	————	-	$0^{\circ} 46'$	19,04 S.
45 d.	————	-	$3^{\circ} 40'$	44,78 North.
46 c.	————	-	$2^{\circ} 7'$	31,34 N.
51	————	-	$0^{\circ} 7'$	6,48 S.
17	————	-	$0^{\circ} 5'$	51,08 N.
1 $\times$	Cygni	-	$0^{\circ} 12'$	25,51 S.
10	————	-	$1^{\circ} 54'$	2,22 S.

These Zenith distances, respectively applied to the Zenith distances of the same stars observed at Dunnose, give the several amplitudes as follow :

By $\beta$	Draconis	-	$2^{\circ} 36' 12,42$
$\gamma$	————	-	11,9
45 d.	————	-	13,4
46 c.	————	-	11,1
51	————	-	11,17
17	————	-	12,1
1 $\times$	Cygni	-	13,32
10	————	-	11,86

The mean of which gives  $2^{\circ} 36' 12'',2$  being the difference in latitude between Dunnose and the Station on Delamere Forest.

**ART. V. *Calculation of the Meridional Distance between Dunnose and Burleigh Moor.***

At Burleigh Moor, on the 28th of June, in the evening, the pole star, when at its greatest apparent western elongation from the meridian, was observed, and the angle taken between it and the staff at Redcar Sands. This angle was found to be  $4^{\circ} 32' 17''$ .

In like manner, when the star, on the morning of the 29th, was observed when at its greatest apparent eastern elongation from the meridian, the angle between the star and staff was found to be  $10^{\circ} 30' 14''$ , the mean of the two results, gives  $7^{\circ} 31' 15''$  for the true bearing of the staff from the meridian of Burleigh Moor.

The angle between the station on Easington Heights, and the staff at Redcar, was found to be  $100^{\circ} 31' 37''$ , subtracting from this angle the bearing of the staff from the meridian, we get  $86^{\circ} 59' 38''$  for the angle between Easington Station and the meridian of Burleigh Moor in a South direction.

The bearings of the sides of the Triangles, used in finding the meridional distance from Burleigh Moor to Dunnose, from the several parallels to the meridian of Burleigh Moor, will be as follow :

Botton Head from Burleigh Moor	-	9	7	2	SW.
Hemingbrough Spire from Botton Head		5	35	4.5	SE.
Clifton Beacon from Hemingbrough Spire		24	50	42	SW.
Hathersage from Clifton Beacon	-	62	0	3	SW.
Orpit from Hathersage	-	5	18	6	SE.
Bardon Hill from Orpit	-	21	13	23	SE.
Arbury Hill from Bardon Hill	-	7	35	11	SE.

Brill from Arbury Hill	-	-	12 22 34	S. E.
Whitehorse Hill from Brill	-	.	50 24 0	S. W.
Highclere from Whitehorse Hill	-		27 39 53,5	S. E.
Butser Hill from Highclere	-	-	34 12 30,5	S. E.
Dunnose from Butser Hill	-	-	21 6 26	S. W.

These bearings give the distances from the meridian of and perpendicular at Burleigh Moor as follows :

		Feet.		Feet.
Botton Head from the meridian		9658,8	W.	60186,4 from the
Hemingbrough Spire	-	13145	E.	293404,2 perpen.
Clifton Beacon	-	39203,2	W.	406462,9
Hathersage	-	120635,6	W.	449759,8
Orpit	-	111242,2	W.	550982,9
Bardon Hill	-	62048,2	W.	677661,5
Arbury Hill	-	38228,2	W.	856508,2
Brill	-	6822,8	W.	999633,1
Whitehorse Hill	-	119782,4	W.	1093081,4
Highclere	-	69376,7	W.	1189233,3
Butser Hill	-	13847	E.	1311654,3
Dunnose	-	36778	W.	1442802,9

In the account of the measurement of an arc of the meridian, page 55, the distance of Clifton Beacon (Beacon Hill) from the perpendicular to the meridian of Dunnose, is shewn to be 1036334,4 feet, and its distance from the same meridian, is stated in the following page as being 4770 feet. If the calculation there specified, be carried on from Clifton Beacon to Burleigh Moor, through the same triangles as used in determining the distance from Burleigh Moor to the point, where a line from

Dunnose parallel to the perpendicular, cuts the meridian of that station, we shall have the following bearings for computation, viz.

Clifton Beacon from Hathersage	61° 52' 17"	N. E.
Hemingbrough Spire from Clifton Beacon	24 42 56	N. E.
Botton Head from Hemingbrough Spire	5 42 50,5	N. W.
Burleigh Moor from Botton Head	- 8 59 15	N. E.

Assuming the distance of Clifton Beacon from the meridian of Dunnose as above mentioned, to be 4770 feet, and from the perpendicular at that station as 1036334,4 feet, we shall get

Hemingbrough Spire from the Meridian	47322,7	E.	1149511,1	from the perpendicular.
Botton Head	-	-	23992,3	E. 1382676,6
And Burleigh Moor	-	-	33514,8	E. 1442884,7

Now the latitude of Dunnose is  $\frac{7}{17}$ " greater than the latitude of the point, where the parallel from that station, cuts the meridian of Burleigh Moor,  $\frac{7}{17}$ ". of a second in the heavens, corresponds to 42 feet on the surface of the earth; hence  $1442882\ 9\frac{1}{2} - 42 = 1442845$  feet may be taken for the distance between the parallels of Burleigh Moor and Dunnose, as derived from the first mode of calculation.

In like manner, the latitude of Burleigh Moor being  $\frac{11}{36}$ " less than the latitude of the point, where a line from that station parallel to the perpendicular at Dunnose, cuts its meridian, we shall have  $1442884,7 - 37,4 = 1442847,3$  feet, for the distance between the parallels, as determined by carrying up the calculations with the direction of the meridian observed at Dunnose. See the 1st volume, page 291.—These results differ something more than two feet, and, at a mean, may be taken as 1442846 feet, to which adding 6,5 (the distance of the station from the point where the sector was set up at Dunnose), we get 1442852,5 feet for the true meridional distance.

In the account of the measurement of an arc of the meridian, the difference of latitude between the parallels of Dunnose and Clifton in Yorkshire, is shewn to be  $2^{\circ} 50' 23'', 38$  (see page 104 of that Account), the terrestrial subtense of the arc being 1036337 feet. See page 107 of the same Account.

If the former operation, as well as the present one, be supposed correct, their results must be consistent, unless we suppose the plumb line of the sector at Burleigh Moor, to have been affected by attraction, arising from the earth's unequal density, in a greater or less degree than at Clifton Beacon.

Setting aside the consideration of elliptical arches not being proportionate to the angles formed by the meeting of the verticals, or intersections of the radii of curvatures at their extremities, yet in the present case, the total arch not exceeding two degrees, we may use a statement of simple proportion. Taking therefore the terrestrial arc between Dunnose and Clifton as 1036337, and its subtense in the Heavens as  $2^{\circ} 50' 23'' 38$ ; and also the total meridional distance between the parallels of Dunnose and Burleigh Moor as 1442852,5 feet, we shall have

$$1036337 \text{ feet} : 2^{\circ} 50' 23'', 38 (10223'', 38) :: 1442852,5 \text{ feet} : 14233', 6 = 3^{\circ} 57' 13'', 6$$

the subtense of that arc, or the difference of latitude between those parallels. But this arc has been found by observation to be  $3^{\circ} 57' 13'', 1$ , almost exactly the same as the computed result.

The length of the degree on the meridian at the middle point between Dunnose and Burleigh Moor, of which the latitude is  $52^{\circ} 35' 45''$ , is 60823,8 fathoms. In the account of the former measurement (p. 108), the length of the degree in  $52^{\circ} 2' 19'', 8$  is stated to be 60820 fathoms which is nearly the same. Were the earth an ellipsoid, the diameter of its polar and equatorial axes in the ratio of 229 to 230, the degree in  $52^{\circ} 34'$  should be



nearly 60830 fathoms, if the length of that in  $52^{\circ} 2'$  be taken 60820.

ART. VI. *Computation of the Distance between the Parallels of Latitude of Dunnose in the Isle of Wight, and Delamere Forest.*

When the great circular instrument was placed over the point at Delamere Forest, the direction of the meridian was observed. The bearing of the staff at Kelsall from the north meridian was found, as may be seen from the observations made at that station, to be  $138^{\circ} 1' 7''$ . The angle between Ashley Heath and the same staff was also taken and seen to be  $73^{\circ} 24' 31'',5$ ; these two angles give  $31^{\circ} 25' 38'',5$  for the south-east bearing of Ashley Heath from the meridian of Delamere Forest. This bearing carried through the series of triangles connecting Delamere Forest with Black Down, a principal station in Dorsetshire, gives the bearings of the following sides from that meridian, viz.

Ashley Heath from Delamere Forest	-	$31^{\circ} 25' 38'',5$	S. E.
Brown Clay Hill from Ashley Heath	-	$16^{\circ} 38' 10''$	S. W.
Malvern Hills from Brown Clay Hill	-	$23^{\circ} 25' 12''$	S. E.
Trelleg Beacon from Malvern Hills	-	$32^{\circ} 14' 58'',5$	S. W.
Dundry Beacon from Trelleg Beacon	-	$6^{\circ} 37' 9'',75$	S. E.
Mendip Hills from Dundry Beacon	-	$19^{\circ} 4' 46''$	S. E.
Ash Beacon from Mendip Hills	-	$3^{\circ} 28' 51'',75$	S. E.
Mintern from Ash Beacon	-	$5^{\circ} 22' 58''$	S. E.
Black Down from Mintern	-	$10^{\circ} 30' 53'',5$	S. W.

These Bearings with their respective sides give

Ashley Heath from the meridian	$67472,1$	E.	$110418,2$	from the
Brown Clay Hill	-	$19203,2$	E.	$279161$ perpen.
Malvern Hills	-	$77902,2$	E.	$407476,5$

Trelleg Beacon	-	-	5075.3 W.	538989.9
Dundry Beacon	-	-	9628.2 E.	665692.9
Mendip Hill	-	-	32246.2 E.	731085.9
Ash Beacon	-	-	36896.2 E.	807525.7
Mintern	-	-	42446.6 E.	866431.5
Black Down	-	-	31546.3 E.	925158.5

The parallel of Black Down cuts the meridian of Delamere Forest 30 feet farther to the southward than the parallel to the perpendicular, therefore  $925158 + 30 = 925188.5$  feet, is the corrected distance between the parallels of latitude of the two stations.

The bearings of Mintern, Ash Beacon, Mendip, and Dundry Beacon from the parallels to the meridian and perpendicular at Blackdown, are given in the second volume, page 115. If the calculation be carried on from the side, Dundry Beacon and Mendip, through the same series of triangles as before used, we shall have

Trelleg Beacon from Dundry Beacon	-	6° 34' 26"	N. W.
Malvern Hills from Trelleg Beacon	-	32° 20' 43"	N. E.
Brown Clay Hill from Malvern Hill	-	23° 19' 27"	N. W.
Ashley Heath from Brown Clay Hill	-	16° 43' 55"	N. E.
Delamere Forest from Ashley Heath	-	31° 19' 58"	N. W.

These bearings, with their respective sides, and the distance from Dundry Beacon to the meridian and perpendicular, viz. 21488 feet W. and 259503 feet, give

		Feet.		Feet.	
Trelleg Beacon from the meridian	-	35980.2	W.	385230.2	from the perpendicular.
Malvern Hills	-	47241.4	E.	517612.2	
Brown Clay Hill	-	11250.8	W.	653225.7	
Ashley Heath	-	37288.9	E.	814689.7	
Delamere Forest	-	30000.7	W.	925214.7	

From the meridional distance thus found (925214.7 feet)

thirty-four feet must be subtracted, the perpendicular at Dunnose, cutting the meridian 34 feet north of the parallel of Delamere Forest. Therefore,  $925214,7 - 34 = 925180,7$  feet is the corrected distance. By calculating with the bearings, from Delamere Forest downwards, the distance has been found to be 925188,5 feet, giving a difference of 8 feet nearly between the two results; the mean 925184,6 feet, may be taken for the true meridian distance between the two stations.

The distance between the parallels of Blackdown and Dunnose is accurately 25005,3 feet. Therefore  $925184,6 + 25005,3 = 950189,9$  feet is the true distance between the parallels of Black Down and Delamere Forest.

Now we have portions of two meridians, proceeding from the same Southern parallel; and running up, one the extent of  $3^{\circ} 57' 13'', 1$ , and the other of  $2^{\circ} 36' 12'', 2$ . If the surface of the earth in the seat of our operations be uniform in its meridional figure, the substance of the arch between Dunnose and Delamere Forest should be nearly in the ratio of their amplitudes. This being the case, we shall have 1442852,5 feet (the meridional distance between Dunnose and Burleigh Moor) :  $3^{\circ} 57' 13'', 1$ , its amplitude :: 950189,9 feet (the meridional distance between Dunnose and Delamere Forest :  $2^{\circ} 36' 13'', 2$ , the amplitude of its arc. From the observations made at the station in Delamere Forest, with the Zenith sector in 1806, combined with those at Dunnose in 1802, with the same instrument, it is found that the difference in latitude of those is  $2^{\circ} 36' 12'', 2$ , making a difference of  $1''$ , between the calculated and observed amplitudes, constituting a difference, setting aside the consideration of a spheroidal figure of the earth of  $\frac{4}{10}$ ths of a second in one degree.— Perhaps, under the consideration of each meridional line being obtained independently of the other, and admitting that neither

of them can be measured with perfect accuracy, together with the chances of the amplitudes being in some small degree, either in excess or defect, we may consider the result as sufficiently consistent and satisfactory, and take 60823 fathoms in latitude  $52^{\circ} 34'$ , or the centre of England, as the length of one degree.

## SECTION SIXTH.

ART. I. *Latitudes and Longitudes of Five principal Stations.*

At page 308 of the first volume of the Trigonometrical Survey, the latitude of Dunnose is stated to be  $50^{\circ} 37' 7''.3$ , and its longitude  $1^{\circ} 11' 36''$ , west from the meridian of Greenwich. The former is derived from the supposition of  $50^{\circ} 44' 23''.7$  being the latitude of Beachy Head, and the latter from  $15^{\circ} 11' 9''$  being the longitude eastward of that station. On this occasion it is proper to remark that, the difference in longitude as well as latitude of those stations, was determined from observations made on the pole star.

The arc in the heavens corresponding to its terrestrial substance between Dunnose and Greenwich, is  $0^{\circ} 51' 31''.39$ . See the account of the measurement of an arc of the meridian, page 107. Taking the latitude of Greenwich as  $51^{\circ} 28' 40''$ , we get  $50^{\circ} 37' 8''.61$  for the corrected latitude of the first mentioned station, differing  $1''.3$  from the previous deduction.

The arc between Dunnose and Clifton Beacon, in Yorkshire, see the account of the former measurement, page 107, is  $2^{\circ} 50' 23''.38$ ; therefore  $50^{\circ} 37' 8''.61 + 2^{\circ} 50' 23''.38 = 53^{\circ} 27' 31''.99$  is the latitude of Clifton.

At page 57 of the same account, the bearings of the stations connecting Clifton Beacon and Dunnose, from the parallels to the meridian of the former, are given, and these bearings, which it will be necessary to repeat on another occasion, give 4917 feet for the distance of Dunnose from the meridian of Clifton. This

distance, using 61182 fathoms for the length of the degree perpendicular to the meridian in latitude  $50^{\circ} 41'$ , combined with the latitude of Dunnose as just found, gives  $1' 16''$ ,5 the longitude of Clifton west from Dunnose. Therefore  $1^{\circ} 11' 36'' + 1' 16''$ ,5 =  $1^{\circ} 12' 52''$ ,5, is the longitude of Clifton west from the meridian of Greenwich,  $1^{\circ} 11' 36''$  being the longitude of Dunnose.

The amplitude of the celestial arc, corresponding to the difference of latitude between Dunnose and Burleigh Moor, as shewn in a previous article, is  $3^{\circ} 57' 13''$ ,1. This, added to the latitude of Dunnose, gives  $54^{\circ} 34' 21''$ ,7 for that of Burleigh Moor.

In the former article, the distance from the parallel at Dunnose to the meridian of Burleigh Moor, is 36778 feet. This, calculating with the latitude of Dunnose, and 61182 fathoms for the length of the degree perpendicular to the meridian, gives  $9' 31''$ ,6 for the longitude of Burleigh Moor east from Dunnose. Therefore  $1^{\circ} 11' 36'' - 9' 31''$ ,6 =  $1^{\circ} 2' 4''$ ,4, is the longitude of that station west from Greenwich.

The latitude of Dunnose is  $50^{\circ} 37' 8''$ ,61. The difference between the parallels of that station and Blackdown in Dorsetshire, is  $4' 6''$ ,5; (see the second volume, page 90), therefore  $50^{\circ} 37' 8''$ ,6 +  $4' 6''$ ,5 =  $50^{\circ} 41' 15''$ ,11 is the latitude of Blackdown, which in the account of 1801, is stated from calculation to be  $50^{\circ} 41' 13''$ ,8. The subtense of the arc, contained by the parallels of Dunnose and Delamere Forest, has been shewn in a foregoing article, to be  $2^{\circ} 36' 12''$ ,2, therefore  $50^{\circ} 37' 8''$ ,6 +  $2^{\circ} 36' 12''$ ,2 =  $53^{\circ} 13' 20''$ ,8 is the latitude of the station on Delamere Forest.

The distance of the parallel at Black Down, from the meridian of Delamere Forest, is 31546,3 feet. This has been shewn in a former page. Taking 61182 fathoms for the length of the degree

perpendicular to the meridian, and using  $50^{\circ} 41' 15''$  for the latitude of Black Down, we get  $8' 8''.4$  for the longitude of Delamere Forest west from Black Down. The longitude of Black Down is  $2^{\circ} 32' 22''.4$ , see the second volume, page 91. Therefore  $2^{\circ} 32' 22''.4 + 8' 8''.4 = 2^{\circ} 40' 30''.8$ , is the longitude of the station on Delamere Forest west from the meridian of Greenwich.

In a subsequent article, specifying the bearing and distances of the several stations from their respective meridians and perpendiculars, it will be shewn that Moel Rhyddlad, in Anglesea, is 406629,7 feet from the meridian of Delamere Forest, and 62475,3 feet north from the perpendicular at that station. These distances converted into their correspondent arcs, and used as *data*, give  $53^{\circ} 22' 45''.38$  for the latitude, and  $1^{\circ} 51' 21''.1$  for the longitude west from Moel Rhyddlad. The longitude of Delamere Forest is  $2^{\circ} 40' 30''.8$ . Therefore  $2^{\circ} 40' 30''.8 + 1^{\circ} 51' 21''.1 = 4^{\circ} 31' 51''.9$  is the longitude of Moel Rhyddlad west from the meridian of Greenwich.

The latitudes and longitudes of these important stations, brought into one point of view, will be as follow.

	Latitude.	Longitude.	
Dunnose * -	$50^{\circ} 37' 8''.6$	$1^{\circ} 11' 36''$	W.
Clifton Beacon	$53 \ 27 \ 32$	$1 \ 12 \ 52,5$	W.
Burleigh Moor	$54 \ 34 \ 21,7$	$1 \ 2 \ 4,4$	W.
Delamere Forest	$53 \ 13 \ 20,8$	$2 \ 40' 30,8$	W.
Moel Rhyddlad	$53 \ 22 \ 45,4$	$4 \ 31 \ 51,9$	W.

ART. II. *Bearings and Distances of the several Stations from the Parallels and Perpendiculars to their respective Meridians.*

*Meridian of Greenwich.*

Names of Stations.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Feet.	Feet.
Lilleyhoe	Royston	65 11 46 NE	11716 W	204872 N
Lidlington		88 55 23 NE		
Royston	Orwell	11 20 3 NE	3139 W	247664 N
Lilleyhoe		46 44 22 NE		
Royston	Balsham	62 18 6 NE	71083 E	248339 N
Orwell		89 28 42 NE		
Orwell	Maddingly	35 27 58 NE	14148 E	271932 N
Balsham		67 29 29 NW		
Balsham	Newmarket	39 54 6 NE	101844 E	285127 N
Orwell		70 21 39 NE		
Newmarket	Ely Minster	35 12 21 NW	61891 E	341755 N
Balsham		5 37 15 NW		
Newmarket	Brandon	35 54 15 NE	145203 E	345020 N
Ely Minster		87 45 12 NE		
Brandon	Littleport	78 0 30 NW	69583 E	361080 N
Newmarket		23 0 49 NW		
Maddingly	Northy	15 42 33 NE	30070 E	328539 N
Balsham		27 5 5 NW		
Bow Brickhill	Brogborough	51 14 35 NE	133800 W	204635 N
Lilleyhoe		56 8 17 NW		
Bow Brickhill	Hill Farm	43 16 24 SE	140324 W	178714 N
Brogborough		14 7 45 SW		
Bow Brickhill	Horsemoor Hill	83 7 44 SE	14305 W	189517 N
Brogborough		32 10 10 SW		

The Bearings of the Stations Lilleyhoe and Lidlington, and Bow Brickhill and Lilleyhoe, from the parallels to the meridian of Greenwich, and their distances from the meridian and its perpendicular, as given at page 116, in the second volume, are the data on which the above results are founded, combined with the angles and sides of the proper Triangles.



## Meridian of Clifton Beacon.

Names of Stations.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Feet.	feet.
Clifton Beacon	Hathersage	61 51 50 SW	81329 W	43491 S
Clifton Beacon	Gringley Beacon	76 17 26 SE	72929 E	7791 S
Hathersage	Bradfield Point	86 8 0 SW	82954 W	5607 S
Clifton Beacon	North end of Base	2 27 20 NW	68435 E	26319 N
Gringley Beacon		68 57 52 NE		
Clifton Beacon		5 49 4 NW		
North end of Base	South end of Base	89 45 12 NW	64161 E	278 N
Hathersage		8 40 36 SW		
Gringley Beacon	Sutton Ashfield	44 34 55 SE	369 W	125641 S
Hathersage	Orpit Heights	34 12 4 SW	71691 W	144693 S
Orpit Heights		5 26 19 SE		
Orpit Heights	Bardon Hill	21 21 36 SE	22198 W	271254 S
Bardon Hill	Holland Hill	83 30 1 SE	23664 E	155558 S
Hathersage		21 37 23 NE		
Weaver Hill	Lords Seat	85 37 37 NW	133662 W	39493 S
Arbury Hill	Helkinton	3 21 20 NE	34827 E	391004 S
Bardon Hill		29 2 7 NE		
Arbury Hill	Burrow Hill	25 27 46 SE	12844 E	439430 S
Helkinton		56 5 38 NE		
Holland Hill	Stathern Point	19 19 29 SW	85053 E	212486 S
Bardon Hill		47 9 32 SE		
Stathern Point	Tilton on the Hill	6 16 47 NE	78408 E	296328 S
Helkinton		4 31 52 SW		
Bardon Hill	Cropwell Bishop	24 43 1 NE	46987 E	202118 S
Stathern Point		45 1 13 NE		
Stathern Point	Bottesford	74 45 42 NW	94193 E	185647 S
Cropwell Bishop		18 48 20 NE		
Helkinton	Naseby Field	70 45 56 NE	53777 E	384063 S
Tifton on the Hill		69 52 49 NE		
Cropwell Bishop	South end of proposed Base	15 40 53 SW	75189 E	206509 S
Holland Hill		81 9 9 SE		
Holland Hill	Lincoln Minster	45 19 11 SE	149652 E	80825 S
Stathern Point		59 19 29 NE		
		26 8 6 NE		

## Meridian of Burleigh Moor.

Burleigh Moor	Easington Heights	86 59 38 SE	42212 E	2217 S
	Botton Head	9 7 2 SW	9659 W	60186 S
	Barnaby Moor	73 24 14 SE	17363 W	5175 S
	Wordeslow Hill	38 33 34 NW	81057 W	101686 N
Easington Heights	Brandon Down	63 18 2 NW	34695 W	67743 N
	Looschoe Moor	15 35 57 SW	25542 E	61925 S
Botton Head		87 10 17 SE		

Names of Stations.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Feet.	Feet.
Bottom Head -	Hemingbrough Spire	5 36 4 SE	13145 E	293404 S
Bottom Head -	Wilton Beacon -	24 55 15 SE	59670 E	209399 S
Hemingbrough Spire	Hunsley Beacon -	28 58 54 NE	100216 E	281667 S
Wilton Beacon -	Crowle Beacon -	29 17 43 SE	47208 E	351120 S
Hemingbrough Spire	Hambleton Down -	82 19 27 NE	37847 W	118576 S
Hunsley Beacon -	Black Hambleton -	37 21 7 SW	44663 W	96486 S
Hemingbrough Spire	Ledstone Beacon -	30 32 55 SE	60436 W	290781 S
Bottom Head -	Staincross Heights -	25 46 19 SW	102307 W	357288 S
Hemingbrough Spire	Pontop Pike -	16 51 36 NW	153207 W	109938 N
Bottom Head -	Collier Law -	43 57 31 SW	197500 W	74342 N
Hambleton Down -	Rufflaw -	17 9 5 NW	150596 W	237313 N
Hambleton Down -	Simonside Hill -	7 28 25 SW	192365 W	261038 N
Hemingbrough Spire	Alnwick Moor -	87 57 34 NW	151104 W	309898 N
Ledstone Beacon -		32 11 37 SW		
Hemingbrough Spire		61 2 32 SW		
Wordeslow Hill -		83 28 33 NW		
Brandon Down -		23 41 14 NW		
Brandon Down -		84 0 2 NW		
Pontop Pike -		51 12 43 SW		
Pontop Pike -		1 10 30 NE		
Collier Law -		16 3 22 NE		
Collier Law -		1 34 31 NE		
Rufflaw -		60 24 8 NW		
Rufflaw -		0 24 3 NW		
Simonside Hill		40 10 51 NE		

Meridian of Delamere Forest.

Delamere Forest -	Mow Cop -	69 33 55 SE	103809 E	38078 S
	Ashley Heath -	31 25 33 SE	67472 E	110418 S
	Lawkesstone Obelisk -	5 37 21 SE	13041 E	132465 S
	Rod ey's Pillar -	23 38 57 W	79676 W	181945 S
	Cryn y Brain Mountain	58 13 0 SW	127472 W	66593 S
Garreg Mountain -	Garreg Mountain -	73 39 26 NW	134612 W	27002 N
	Howell Hill -	65 44 30 NW	90942 W	40982 N
	Billinge Beacon -	3 42 32 NW	6757 W	104244 N
	Beliefeld Hill -	25 18 54 NE	22794 E	48188 N
	Llanellian Mountain,	82 13 19 SW	228856 W	14129 S
Cryn y Brain Mountain	Denbighshire -	56 22 31 NW	255197 W	42726 N
	Great Ormes Head -	82 34 15 NW	305714 W	52979 S
	Snowdon -	42 38 51 NW	233929 W	109465 S
	Arrennig Mountain	64 56 48 SW	221777 W	157137 S
	Arran Fowddy -	86 4 19 NW		
Garreg Mountain -		36 2 47 SW		
Cryn y Brain Mountain		71 16 16 SW		
Garreg Mountain -		25 19 55 SW		
Cryn y Brain Mountain		51 36 53 SW		

Names of Stations.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Feet.	Feet.
Garreg Mountain -	Llanellian Mountain,	79 1 47 NW	351829 W	69108 N
Llanellian Mountain	Anglesea -	65 54 43 NW		
Llanellian Mountain A.	Moel Rhyddlad -	83 5 58 SW	406630 W	62475 N
Snowdon -		41 9 23 NE		
Llanellian Mountain D.	Moelfre Issa -	83 53 4 SE	194295 W	10417 N
Great Ormes Head -		62 3 38 SE		
Moelfre Issa -	Gwaunysgaer Down -	55 22 33 NE	155312 W	37337 N
Great Ormes Head -		86 54 52 SE		
Moelfre Issa -	West end of Base -	6 37 46 NW	196327 W	27903 N
Gwaunysgaer Down		77 2 58 SW		
West end of Base -	East end of Base -	82 23 2 SE	172029 W	24653 N
Moelfre Issa -		57 24 25 NE		
Ashley Heath -	Weaver Hill -	72 32 24 NE	181622 E	74514 S
Mow Copt -		65 16 18 SE		
Weaver Hill -	Castle Ring -	8 9 19 SW	165854 E	184538 S
Ashley Heath -		53 0 21 SE		
Ashley Heath -	The Wickin -	22 27 47 SW	29760 E	201633 S
Castle Ring -		82 50 23 SW		
Ashley Heath -	Long Mount Pole -	38 5 12 SW	39648 W	247096 S
Cyrn y Brain Mountain		30 25 36 SE		
Hawkestone Obelisk	Long Mountain -	52 46 51 SW	89341 W	210231 S
Cyrn y Brain Mountain		7 11 37 SE		
Ashley Heath -	Brown Clay Hill -	16 38 10 SW	19204 E	271961 S
Hawkestone Obelisk		2 31 50 SE		
Brown Clay Hill -	Bar Beacon -	76 43 14 NE	172227 E	235846 S
Long Mountain -		10 7 40 SE		
Brown Clay Hill -	Stow Hill -	65 41 43 SW	71037 W	312714 S
Stow Hill -		57 32 1 SE		
Brown Clay Hill -	Malvern Hill -	23 25 12 SE	77903 E	407477 S
Malvern Hill -		72 29 18 SW		
Stow Hill -	Cradle Mountain -	10 21 49 SW	98546 W	463149 S
Stow Hill -		77 40 2 NW		
Long Mountain -	Llandinam Mountain	43 52 44 SW	167591 W	291605 S
Long Mountain -		10 36 5 SW		
Stow Hill -	Radnor Forest -	51 16 46 SW	115144 W	348076 S
Malvern Hill -		16 21 1 SW		
Cradle Mountain -	May Hill -	81 22 30 SE	54754 E	486403 S
Malvern Hill -		32 15 1 SW		
May Hill -	Trelleg Beacon -	48 41 6 SW	5077 W	538994 S
Malvern Hill -		48 25 18 SE		
May Hill -	Cleeve -	83 5 3 NE	153392 E	474442 S
Malvern Hill -		2 41 37 SE		
May Hill -	Symonds Hall -	20 31 32 SE	85483 E	568490 S
Trelleg Beacon -		72 46 4 SW		
Cradle Mountain -	Mynydd Mane -	6 10 4 SE	87588 W	564584 S
Cradle Mountain -		42 26 3 SW		
Mynydd Mane -	Llangeinor Mountain	84 27 17 SW	201382 W	575632 S
Mynydd Mane -		53 57 7 NW		
Llangeinor Mountain	Capellante -	12 32 29 NE	183410 W	494842 S

Names of Stations.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Feet.	Feet.
Mynydd Mane -	Garth Hill -	47° 1' 42" SW	138509 W	612023 S
Llangeinor Mountain -	Ogmoor Down -	59° 56' 13" SE	209328 W	639180 S
Garth Hill -	Flatholmes Lighthouse	69° 1' 13" SW	98908 W	673438 S
Llangeinor Mountain -	Dunkery Beacon -	7° 7' 39" SW	206790 W	750102 S
Mynydd Mane -	Go Hill -	5° 56' 26" SW	48691 W	124679 N
Garth Hill -	Rivington Hill -	32° 48' 49" SE	36849 E	149004 N
Garth Hill -	Wittle Hill -	26° 18' 44" SW	90920 E	162679 N
Ogmoor Down -	Axedge -	1° 18' 37" SE	161352 E	4756 N
Heswell Hill -	Holme Moss -	26° 47' 4" NE	174440 E	116690 N
Billinge Beacon -	Bleasdale Forest -	64° 1' 8" NW	13382 E	253149 N
Wittle Hill -	Boulsworth Hill -	75° 48' 18" SW	124757 E	217768 N
Billinge Beacon -	Rumbles Moor -	44° 15' 7" NE	185144 E	249824 N
Mow Copt -	Great Whernside -	3° 39' 47" NW	147270 E	343577 N
Billinge Beacon -	Pendle Hill -	59° 6' 3" NW	83529 E	256338 N
Wittle Hill -	Beryl Hill -	24° 2' 14" SE	76892 W	225684 N
Mow Copt -	Ingleborough Hill -	52° 57' 14" NE	61683 E	344985 N
Wittle Hill -	Black Comb -	61° 9' 43" SE	137430 W	378835 N
Axedge -	The Calf -	6° 40' 0" NE	36724 E	418477 N
Wittle Hill -	Shunnor Fell -	40° 30' 20" NW	96196 E	419806 N
Billinge Beacon -	Water Crag -	7° 41' 13" NE	122356 E	444112 N
Wittle Hill -	Helvellin Mountain -	31° 33' 35" NE	70466 W	176684 N
Bleasdale Forest -	Sca Fell, Lower Top -	72° 14' 12" SE	114683 W	447935 N
Boulsworth Hill -	Dent Hill -	62° 2' 19" NE	170400 W	468957 N
Holme Moss -	Cross Fell -	4° 35' 47" NE	42045 E	540868 N
Boulsworth Hill -	High Pike -	10° 8' 43" NE	78855 W	541870 N
Rumbles Moor -		21° 59' 51" NW		
Boulsworth Hill -		65° 45' 8" NW		
Wittle Hill -		5° 43' 48" NW		
Bleasdale Forest -		72° 54' 9" SW		
Billinge Beacon -		30° 0' 27" NW		
Boulsworth Hill -		26° 22' 20" NW		
Great Whernside -		89° 3' 28" NW		
Ingleborough Hill -		80° 21' 7" NW		
Bleasdale Forest -		50° 15' 34" NW		
Ingleborough Hill -		18° 45' 34" NW		
Black Comb -		77° 10' 34" NE		
Ingleborough Hill -		24° 45' 45" NE		
The Calf -		88° 43' 10" NE		
Shunnor Fell -		47° 6' 8" NE		
Great Whernside -		13° 54' 59" NW		
Ingleborough Hill -		45° 5' 52" NW		
Black Comb -		34° 23' 10" NE		
Black Comb -		18° 13' 18" NE		
The Calf -		78° 59' 26" NW		
Black Comb -		20° 5' 39" NW		
Sca Fell, Lower Top -		69° 19' 40" NW		
The Calf -		2° 29' 23" NE		
Helvellin Mountain -		60° 17' 46" NE		
The Calf -		43° 7' 38" NW		
Cross Fell -		89° 31' 27" NW		

Names of Stations.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Feet.	Feet.
Cross Fell	Crif-Fell	69 52 16 NW	198212 W	628927 N
Helvellin Mountain	Crif-Fell	49 0 0 NW		
Dent Hill	Scilly Bank	36 38 6 NW	185862 W	489750 N
Black Comb	Scilly Bank	23 35 20 NW		
Dent Hill	Skiddaw	53 42 21 NE	97810 W	522264 N
Crif-Fell	Skiddaw	43 16 5 SE		
Black Comb	Snea Fell	88 32 34 NW	379503 W	384996 N
Scilly Bank	Snea Fell	61 35 18 SW		
Black Comb	North Berule	86 3 45 NW	364827 W	394489 N
Scilly Bank	North Berule	61 58 31 SW		
Crif-Fell	Wisp Hill	48 18 8 NE	58722 W	753194 N
Cross Fell	Wisp Hill	25 23 18 NW		
Cross Fell	The Cheviot	13 52 31 NE	112071 E	824364 N
Wisp Hill	The Cheviot	67 22 33 NE		
Wisp Hill	Says Law	16 46 17 NE	3167 E	958532 N
The Cheviot	Says Law	39 3 57 NW		
Wisp Hill	Queensberry Hill	89 59 18 NW	189103 W	753213 N
Crif-Fell	Queensberry Hill	4 11 28 NE		
Wisp Hill	The Dunrigs	22 56 35 NW	103316 W	858540 N
Says Law	The Dunrigs	46 47 56 SW		
Says Law	Mordington Hill	83 38 21 SE	126416 E	944793 N
The Cheviot	Mordington Hill	6 47 36 NE		
Mordington Hill	Blackheddon	25 55 25 SE	156316 E	883277 N
Says Law	Blackheddon	63 49 54 SE		
Blackheddon	Lumsdane Hill	30 40 46 NW	98366 E	980955 N
Says Law	Lumsdane Hill	76 44 42 NE		
Says Law	Largo Law	20 11 25 NW	48820 W	1099902 N
Lumsdane Hill	Largo Law	51 3 23 NW		
Says Law	East Lomond Top	37 44 22 NW	108892 W	1103315 N
Lumsdane Hill	East Lomond Top	59 26 36 NW		

*Meridian of Moel Rhyddlad.*

Moel Rhyddlad	Llanelian Mountain	81 36 11 NE	54607 E	8061 N
Moel Rhyddlad	Llanelian Mountain	66 40 5 SE	78418 E	33824 S
Llanelian Mountain A.	Llwydiart Mountain	29 37 8 SE		
Moel Rhyddlad	Signal Staff	49 29 56 SW	27731 W	23685 S
Llwydiart Mountain	Holyhead Mountain	84 32 39 NW		
Moel Rhyddlad	Snowdon	42 39 10 SE	103898 E	112779 S
Llanelian Mountain A.	Snowdon	22 11 37 SE		
Moel Rhyddlad	Rhiw Mountain	5 13 53 SW	18237 W	199184 S
Llwydiart Mountain	Rhiw Mountain	30 18 20 SE		
Moel Rhyddlad	Ynaliog Mountain	11 44 38 SW	43059 W	207137 S
Llwydiart Mountain	Ynaliog Mountain	35 1 36 SW		
Moel Rhyddlad	Bwlch Mawr	18 4 43 SE	44545 E	136458 S
Llwydiart Mountain	Bwlch Mawr	18 15 50 SW		

Names of Stations.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Feet.	Feet.
Snowdon -	Pengarn Mountain -	4 13 33 SE	114438 E	255418 S
Rhiw Mountain -	Cader Idris -	67 1 48 SE	141910 E	247128 S
Rhiw Mountain -		73 20 1 SE		
Pengarn Mountain -	Aberystwith Station -	73 12 33 NE	106482 E	345860 S
Rhiw Mountain -		40 22 29 SE		
Pengarn Mountain -	Plynlimmon -	5 1 25 SW	170698 E	331775 S
Aberystwith Station -		77 37 48 NW		
Cader Idris -	Tregarron Down -	18 47 1 SE	157384 E	117147 S
Aberystwith Station -		35 31 42 SE		
Plynlimmon -	Talsarn -	8 51 48 SW	92719 E	423237 S
Aberystwith Station -		10 5 13 SE		
Tregarron Down -	Trecastle Beacon -	84 37 9 SE	189864 E	544215 S
Talsarn -		38 36 8 SE		
Tregarron Down -	New Inn Hill -	14 15 52 SE	74985 E	510580 S
Talsarn -		11 28 42 SW		
Trecastle Beacon -	Capel Kyron -	73 21 40 NW	38457 E	459678 S
Talsarn -		56 7 6 SW		
New Inn Hill -	Precelly Top -	35 39 54 NW	50868 W	522673 S
Talsarn -		55 17 51 SW		
New Inn Hill -	Lannion -	84 30 37 SW	89844 E	593665 S
New Inn Hill -		10 8 22 SE		
Trecastle Beacon -	Margam Down -	64 0 51 SW	191672 E	652970 S
Lannion -		59 46 54 SE		
Trecastle Beacon -	Cefn Bryn -	0 57 36 SE	92956 E	656078 S
Lannion -		2 51 20 SE		
Margam Down -	Marros Beacon -	88 11 54 SW	12256 W	597233 S
Lannion -		87 59 48 SW		
Cefn Bryn -	Highgate Mountain -	60 46 48 NW	88575 W	626605 S
Precelly Top -		19 56 32 SW		
Marros Beacon -	Newton Down -	68 56 59 SW	83414 W	592655 S
Precelly Top -		22 55 9 SW		
Marros Beacon -	Plumstone Down -	88 2 59 SW	111248 W	551138 S
Precelly Top -		64 45 32 SW		
Newton Down -	St. Ann's Hill -	29 50 31 NW	140424 W	614368 S
Plumstone Down -		24 46 13 SW		
Newton Down -		75 31 50 SW		

*Meridian of Black Doren.*

Mendip Hill	Blagdon	52 38 31 NW	43818 W	228302
Dundry Beacon		35 35 24 SW		
Blagdon	Brent Knoll	65 53 48 SW	90868 W	207251 N
Moorlynych		23 39 38 NW		
Blagdon	Bagborough	54 50 9 SW	147982 W	154918 N
Moorlynych		84 41 22 SW		
Blagdon	Flatholmes Lighthouse	74 46 29 NW	130067 W	251937 N
Moorlynych		33 17 1 NW		

Names of Stations.		Bearings.	Distance from Meridian.	Distances from Perpendicular.
			Fect.	Fect.
Bagborough -	Dunkery Beacon -	77° 9' 29" NW	238111 W	175468 N
Flatholmes Lighthouse -	Brompton Ralph -	54° 42' 45" SW	178930 W	150372 N
Bagborough -	Haddon Beacon -	81° 37' 59" SW	214760 W	133012 N
Dunkery Beacon -	North Molton Ridge -	67° 1' 13" SE	271478 W	147215 N
Bagborough -	Span Head -	71° 49' 31" S	290090 W	159350 N
Dunkery Beacon -	Cotten Hill -	28° 47' 53" SE	339088 W	135255 N
Dunkery Beacon -	Paracombe -	50° 15' 12" SW	300870 W	181147 N
Haddon Beacon -	Hangman Hill -	78° 27' 11" NW	333400 W	195969 N
Dunkery Beacon -	Hartland Point -	72° 47' 9" SW	454335 W	128443 N
North Molton Ridge -		47° 49' 2" NW		
Span Head -		63° 48' 31" SW		
North Molton Ridge -		81° 14' 18" SW		
North Molton Ridge -		36° 17' 52" NW		
Cotten Hill -		39° 47' 18" NE		
Paracombe -		65° 33' 26" NE		
Cotten Hill -		5° 16' 42" NE		
Paracombe -		71° 2' 45" SW		
North Molton Ridge -		84° 40' 21" SW		

ART. III. *Bearings and Distances of several Church Steeples, and other Objects of Note, in the third Section of the present Work, from the Parallels and Perpendiculars to their respective Meridians.*

*Meridian of Greenwich.*

Royston	Great St. Mary's Steep.	32° 23' 38" NE	28388 E	268080 N
Orwell	Cambridge -	57° 4' 23" NE	14924 E	269929 N
Royston	Noton Spire -	22° 16' 6" NE	1252 E	242889 N
Orwell	Great Eversden Steeple	39° 3' 2" NE	4470 E	222150 N
Royston	Melbourn Steeple	15° 6' 51" NE	21214 E	205095 N
Orwell	Headon Steeple -	40° 2' 41" NE	1537 E	201398 N
Royston	Chishall Steeple -	43° 7' 50" NE	1740 W	241394 N
Orwell	Orwell Steeple -	16° 36' 19" SE	35334 W	205969 N
Royston	Ashwell Spire -	89° 36' 43" NE	3159 E	229056 N
Orwell	Meldreth Steeple -	29° 46' 21" SE		
Royston		83° 14' 16" SE		
Orwell		24° 7' 51" SE		
Royston		15° 16' 38" NE		
Orwell		12° 34' 33" SE		
Royston		87° 20' 24" NW		
Orwell		37° 40' 30" SE		
Royston		31° 35' 40" NE		
Orwell		18° 41' 56" SE		

Names of Stations and intersected Objects.			Bearings.	Distance from Meridian.	Distance from Perpendicular.
				Feet.	Feet.
Roydon	-	Bassingbourn Steeple	5 39 56 NW	13221 W	220027 N
Orwell	-		20 2 24 SW		
Maddingley	-	Granchester Steeple	32 33 20 SE	23050 E	257990 N
Orwell	-		63 28 53 NE		
Maddingley	-	Trinity College Chapel	76 46 14 SE	27944 E	268691 N
Orwell	-		55 55 27 NE		
Maddingley	-	Trinity Spire, Cam-bridge	76 7 30 SE	28881 E	268293 N
Orwell	-		57 12 38 NE		
Maddingley	-	Truington Steeple	37 9 15 SE	26121 E	256134 N
Orwell	-		73 51 23 NE		
Balsham	-	Balsham Steeple	29 16 22 SE	175294 E	240826 N
Orwell	-		85 1 4 SE		
Balsham	-	Sutton Steeple	24 26 37 NW	30238 E	338199 N
Newmarket	-		53 27 19 NW		
Newmarket	-	Haddenham Spire	34 35 28 NW	35246 E	326645 N
Maddingley	-		58 3 53 NW		
Balsham	-	Cottentham Spire	29 32 54 NE	31634 E	302774 N
Balsham	-		35 55 43 NW		
Balsham	-	Bottisham Steeple	19 53 30 NW	61759 E	274107 N
Newmarket	-		74 37 42 SW		
Newmarket	-	Mildenhall Steeple	26 8 46 NE	119353 E	320794 N
Grandborough	-		46 51 46 SW		
Newmarket	-	Stretham Steeple	53 15 1 NW	51552 E	322685 N
Grandborough	-		9 SW		
Bowbrickhill	-	Phenfield Steeple	87 31 42 NE	12525 W	196493 N
Kinworth	-		63 7 16 NE		
Powrickhill	-	Kinshall Steeple	88 40 18 NE	14491 W	193673 N
Kinworth	-		63 54 27 NE		
Bowbrickhill	-	Grandborough Steeple	81 0 56 SE	16722 W	188184 N
Kinworth	-		65 53 23 NE		
Horseman Hill	-	Waddington Steeple	23 55 41 NE	139201 W	198933 N
Brogborough	-		43 27 14 SW		
Meremer Hill	-	Milton Montyne Steeple	23 2 32 NE	138390 W	201080 N
Brogborough	-		52 14 7 SW		
Hill Farm	-	Woburn Abbey	10 19 0 SE	134742 W	159647 N
Brogborough	-		1 12 0		
Hill Farm	-	Milton Bryant Steeple	87 12 14 NE	132245 W	179108 N
Bowbrickhill	-		59 17 36 SE		
Trusler Hill	-	Tuddington Steeple	13 47 34 SE	119593 W	172696 N
Lilleyhoe	-		50 50 NW		
Trusler Hill	-	Aspley Steeple	54 15 40 NW	14118 W	197260 N
Brogborough	-		44 55 42 SW		
Trusler Hill	-	Willen Steeple	51 43 37 NW	150362 W	205205 N
Brogborough	-		83 1 30 NW		
Trusler Hill	-	Little Brickhill Steeple	76 23 52 SW	152039 W	185126 N
Bowbrickhill	-		6 33 48 SW		



## Meridian of Clifton Beacon.

Names of Stations and intersected Objects.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Feet.	Feet.
Gringley Beacon -	Belton Steeple -	15 29 33 NE	87035 E	33103 N
Crowle Beacon -		1 55 55 SE		
Clifton Beacon -	Gringley on the Hill,	75 40 29 SE	71069 E	18149 S
Crowle Beacon -	Steeple -	11 39 42 SW		
Clifton Beacon -		15 33 15 NE	33168 E	119160 N
Crowle Beacon -	Selby Steeple -	39 51 32 NW		
Clifton Beacon -		81 40 8 NE	80819 E	118350 N
Crowle Beacon -	Axholme Steeple -	7 7 15 SW		
Clifton Beacon -		1 55 41 SW	855 W	25395 S
Crowle Beacon -	Loughton Spire -	47 6 38 SW		
Clifton Beacon -		35 20 29 NE	26961 E	38021 N
Crowle Beacon -	Hatfield Spire -	73 32 23 SW		
Clifton Beacon -		47 17 30 NE	60783 E	56109 N
Crowle Beacon -	Thorne Steeple -	88 44 6 NW		
Gringley Beacon -		18 17 2 NE	87230 E	25492 S
Crowle Beacon -	Epworth Steeple -	1 48 30 SE		
Gringley Beacon -		42 58 22 SW	60330 E	4267 S
Clifton Beacon -	Massin Steeple -	85 57 15 SE		
Gringley Beacon -		23 11 31 SW	68706 E	27648 S
Clifton Beacon -	East Retford Spire -	68 4 40 SE		
Arbury Hill -		6 44 16 NE	12983 E	357551 S
Helkinton -	South Kilworth Steeple	33 7 50 NW		
Arbury Hill -		1 21 58 NE	4055 E	366076 S
Helkinton -	Lutterworth Steeple	50 58 9 NW		
Arbury Hill -		35 19 8 NE	32146 E	407593 S
Helkinton -	West Haddon Steeple	9 11 32 SW		
Arbury Hill -		43 34 34 NE	14342 E	437149 S
Helkinton -	Daventry Spire -	23 56 51 SW		
Arbury Hill -		45 3 26 NE	47225 E	404981 S
Helkinton -	Guilesborough Spire	41 36 17 SE		
Arbury Hill -		22 40 44 NW	15129 W	408949 S
Helkinton -	Dunchurch Steeple -	70 15 35 SW		
Arbury Hill -		2 11 30 NE	5341 E	364142 S
Helkinton -	Misterton Steeple -	47 38 54 NW		
Arbury Hill -		38 14 51 NE	51618 E	387186 S
Helkinton -	Naseby Steeple -	77 7 47 NE		
Arbury Hill -		1 39 42 NW	1354 E	425966 S
Burrow Hill -	Branston Spire -	50 43 46 NW		
Arbury Hill -		54 32 54 NW	11865 W	440155 S
Burrow Hill -	Shuckburgh Steeple -	88 38 29 SW		
Arbury Hill -		33 44 57 NE	42855 E	388998 S
Burrow Hill -	Cold Ashby Steeple -	26 22 5 NE		
Helkinton -		18 24 42 NW	27927 E	370295 S
Naseby Station -	North Kilworth Spire	61 55 55 NW		
Helkinton -		37 15 9 NE	49364 E	371906 S
Naseby Station -	Sibertoft Steeple -	19 55 37 NW		

Names of Stations and intersected Objects.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
		° ' " SE	Fect.	Fect.
Weaver Hill -	Litchfield Spire -	2 39 51 SE	135299 W	281269 S
Stathern Point -	Cold Overton Steeple	6 8 43 SE	92595 E	282549 S
Burrow Hill -		69 38 35 SE		
Helkinton -	Welford Steeple -	6 13 44 NE	36058 E	379737 S
Nasby Station -		76 13 47 NW		
Tilton on the Hill -	Waltham on the Wolds	11 3 43 NE	90672 E	233612 S
Stathern Point -	Spire	14 54 12 SE		
Tilton on the Hill		84 44 36 SW	70495 E	297071 S
Burrow Hill -	Tilton on the Hill Spire	17 18 46 SW		
Bardon Hill -		24 27 17 NE	17087 E	184882 S
Stathern Point -	Nottingham Steeple	67 53 10 NW	39795 W	237803 S
Bardon Hill -		27 36 4 NW		
Stathern Point -	Breedon on the Hill	78 32 0 SW	92637 E	187441 S
Stathern Point -	Steeple.	16 50 47 NE		
Holland Hill -	Bottesford Spire -	65 11 53 SE	89183 E	199187 S
Stathern Point -		17 15 3 NE		
Holland Hill -	Redmile Spire -	56 20 47 SE	59897 E	184351 S
Stathern Point -		41 47 23 NW		
Holland Hill -	Bingham Spire -	51 32 11 SE	79032 E	197314 S
Stathern Point -		21 37 39 NW		
Holland Hill -	Langar Steeple -	52 59 5 SE	80030 E	203988 S
Stathern Point -		30 32 48 NW		
Holland Hill -	Plungar Steeple -	49 20 13 SE	74090 E	196824 S
Stathern Point -		34 58 3 NW		
Holland Hill -	Granby Steeple -	50 42 46 SE	136234 E	156941 S
Stathern Point -		42 39 16 NE		
Holland Hill -	Caythorpe Spire -	89 18 3 SE	148540 E	117637 S
Stathern Point -		33 46 54 NE		
Holland Hill -	Coleby Spire -	73 6 1 NE	140045 E	146540 S
Stathern Point -		39 49 16 NE		
Holland Hill -	Leadenham Spire -	85 33 53 NE	147740 E	112101 S.
Stathern Point -		31 58 54 NE		
Holland Hill -	Harmstone Steeple -	70 41 37 NE	86657 E	139788 S
Stathern Point -		1 15 56 NE		
Holland Hill -	Newark Spire -	75 50 13 NE	81082 E	214141 S
Stathern Point -		67 30 38 SW		
Bottesford -	Stathern Steeple -	24 43 1 SW	152309 E	123418 S
Stathern Point -		37 3 12 NE		
Bottesford -	Boothby Steeple -	43 2 16 NE	150676 E	130952 S
Stathern Point -		38 49 29 NE		
Bottesford -	Wellington Steeple	45 54 55 NE	51597 E	229230 S
Stathern Point -		63 25 42 SW		
Bottesford -	Over Broughton Steeple	44 21 1 SW	104723 E	171982 S
Stathern Point -		25 54 6 NE		
Bottesford -	Long Bennington Steeple	37 30 29 NE	106890 E	163027 S
Stathern Point -		23 49 2 NE		
Bottesford -	Doddington Spire -	29 17 40 NE	97792 E	188084 S
Stathern Point -		27 53 15 NE		
Bottesford -	Foston Spire -	56 1 34 SE		

Names of Stations and intersected Objects.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Feet.	Feet.
Stathern Point -	Nether Broughton	{ 60° 8' 11" SW }	55666 E	229371 S
Bottesford -	Steeple -	{ 41° 23' 29" SW }		
Bardon Hill -	Loughborough Steeple	{ 49° 45' 0" NE }	3591 E	249436 S
Tilton on the Hill -		{ 57° 54' 51" NW }		
Bardon Hill -	Belton Spire -	{ 8° 34' 22" NW }	25045 W	252377 S
Loughborough -		{ 84° 8' 10" SW }		
Cropwell Bishop -	Kilvington Steeple -	{ 70° 32' 59" SE }	77941 E	213060 S
Bottesford -		{ 30° 40' 15" SW }		
Cropwell Bishop -	Barkston Spire -	{ 88° 18' 3" NE }	82228 E	201067 S
Bottesford -		{ 36° 24' 51" SW }		
Cropwell Bishop -	Whatton Spire -	{ 56° 36' 31" NE }	72322 E	185427 S
Bottesford -		{ 89° 24' 0" NW }		
Holland Hill -	Kritch Spire -	{ 1° 53' 19" NW }	20906 E	71861 S
Sutton -		{ 21° 34' 48" NE }		
Sutton -	Sutton Spire -	{ 67° 14' 48" NW }	10923 W	121219 S
Orpit Heights -		{ 68° 52' 37" NE }		
Sutton -	Kirby Spire -	{ 60° 39' 21" SW }	10749 W	131480 S
Orpit Heights -		{ 77° 45' 47" NE }		
Weaver Hill -	Derby Steeple -	{ 68° 21' 21" SE }	50752 W	191407 S
Orpit Heights -		{ 16° 41' 5" SW }		

*Meridian of Barleigh Moor.*

Wilton Beacon -	York Minster -	{ 79° 19' 30" SW }	8951 W	222335 S
Bottom Head -		{ 0° 15' 0" SE }		
Rumbles Moor -	York Spire -	{ 83° 20' 6" NE }	8621 W	224182 S
Ledstone Beacon -		{ 37° 52' 57" NE }		
Rumbles Moor -	Wakefield Spire -	{ 41° 3' 31" SE }	99015 W	325960 S
Ledstone Beacon -		{ 49° 18' 14" SW }		
Ledstone Beacon -	Brayton Spire -	{ 88° 48' 22" SE }	9627 W	291840 S
Staincross Heights -		{ 54° 46' 17" NE }		
Ledstone Beacon -	Drax Spire -	{ 77° 23' 45" SE }	13676 E	307353 S
Staincross Heights -		{ 66° 42' 22" NE }		
Rumbles Moor -	High Howland Steeple	{ 24° 1' 6" SE }	118661 W	357190 S
Staincross Heights -		{ 89° 39' 14" SW }		
Ledstone Beacon -	Howden Steeple -	{ 83° 45' 0" SE }	37484 W	301504 S
Hambleton Down -		{ 22° 22' 56" SE }		
Ledstone Beacon -	Bishop Wilton Spire	{ 56° 9' 25" NE }	55128 E	213291 S
Hambleton Down -		{ 44° 28' 7" SE }		
Hambleton Down -	Ripon Church -	{ 58° 16' 17" SW }	102931 W	158820 S
Black Hambleton Down		{ 43° 4' 8" SW }		
Wilton Beacon -	Home Steeple -	{ 56° 24' 9" NE }	107477 E	241160 S
Hunsley Beacon -		{ 10° 9' 51" NE }		
Hunsley Beacon -	Crowle Steeple -	{ 38° 31' 3" SW }	44466 W	351709 S
Crowle Beacon -		{ 77° 51' 18" SW }		
Collier Law -	Durham Cathedral	{ 89° 59' 8" SE }	113047 W	74320 N
Wordslow Hill -		{ 49° 27' 35" SW }		

Names of Stations and intersected Objects.			Bearings.	Distance from Meridian.	Distance from Perpendicular.
				Feet.	Feet.
Collier Law	-	Brusselton Folly	47° 20' 10" SE	136738 W	18342 N
Wordeslow Hill	-		33 44 52 SW		
Collier Law	-	Westerton Folly	63 35 35 SE	124502 W	38093 N
Wordeslow Hill	-		37 20 33 SW		
Collier Law	-	Merrington Ch Tower	65 24 51 SE	117265 W	39312 N
Wordeslow Hill	-		30 8 15 SW		
Collier Law	-	West Boldon Spire	60 47 12 NE	86809 W	136240 N
Wordeslow Hill	-		9 27 3 NW		
Collier Law	-	Newbiggin Spire	33 54 6 NE	96493 W	224649 N
Wordeslow Hill	-		7 9 17 NW		
Collier Law	-	Seaton Delaval Summer	42 45 16 NE	93574 W	186754 N
Wordeslow Hill	-	House	8 22 15 NW		
Brandon Down	-	North Shields Church	27 48 39 NE	85524 W	160965 N
Wordeslow Hill	-		4 18 31 NW		
Brandon Down	-	Sherf Hill Beacon Staff	17 39 1 NE	113713 W	13692 N
Wordeslow Hill	-		45 31 25 NW		
Wordeslow Hill	-	Hartlepool Church	42 16 24 SE	29883 W	45393 N
Burleigh Moor	-	Tower	33 21 24 NW		
Wordeslow Hill	-	Sunderland Lighthouse	28 13 14 NE	67529 W	126893 N
Burleigh Moor	-		28 1 13 NW		
Wordeslow Hill	-	Windmill on Marston	9 33 37 NE	74124 W	142852 N
Burleigh Moor	-	Hill	27 25 26 NW		
Burleigh Moor	-	Easington Church	40 37 54 NW	66871 W	77931 N
Brandon Down	-	Tower	81 27 23 NE		
Wordeslow Hill	-	Chester-le-Street Spire	84 57 12 NW	111826 W	104402 N
Pontop Pike	-		82 22 58 SE		
Wordeslow Hill	-	Whitburn Spire	18 32 26 NE	68944 W	137802 N
Pontop Pike	-		71 42 8 NE		
Wordeslow Hill	-	Tynemouth Lighthouse	2 7 23 NE	78739 W	164237 N
Rufflaw	-		44 8 SE		
Rufflaw	-	Lighthouse Coquet Is-	48 20 18 NE	103876 W	278882 N
Alnwick Moor	-	land	56 42 20 SE		
Rufflaw	-	Earls Mount Obelisk	2 12 9 NE	147683 W	313031 N
Alnwick Moor	-		47 50 47 NE		
Rufflaw	-	Warkworth Castle	50 33 15 SE	18825 W	283342 N
Alnwick Moor	-		34 36 52 NE		
Alnwick Moor	-	Bambrough Castle	10 17 28 NE	138437 W	379661 N
Blackheddon	-		75 54 15 SE		
Alnwick Moor	-	Embleton Church	44 22 55 NE	223515 W	338089 N
Blackheddon	-	Tower	48 35 19 SE		
Alnwick Moor	-	Dunstanbrough Castle	53 47 43 NE	115157 W	336211 N
Blackheddon	-		51 17 8 SE		
Alnwick Moor	-	Lighthouse on the West	18 18 14 NE	127096 W	382474 N
Blackheddon	-	Staples	81 25 52 SE		
Alnwick Moor	-	Beadnell Spire	28 47 54 NE	123487 W	360381 N
Blackheddon	-		62 58 54 SE		
Alnwick Moor	-	Windmill on Sunderland	25 7 40 NE	124008 W	367668 N
Blackheddon	-	Point	68 36 9 SE		

*The Account of a  
Meridian of Delamere Forest.*

Names of Stations and intersected Objects.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Fect.	Fect.
Cleeve -	Glocester Cathedral -	70° 7' 32" SW	99194 E.	494033 S
Malvern Hill -		13 49 16 SE		
Cleeve -	Church Down Steeple -	63 52 15 SW	115937 E.	492810 S
Malvern Hill -		24 1 28 SE		
Malvern Hill -	Cheltenham Steeple -	38 53 38 SE	137483 E.	481327 S
May Hill -		86 29 17 NE		
Malvern Hill -	Cleeve Steeple -	48 12 53 SE	141426 E.	464240 S
May Hill -		75 39 20 NW		
Malvern Hill -	Beckford Steeple -	66 12 17 SE	146216 E.	437598 S
May Hill -		61 54 55 NE		
Malvern Hill -	Prestbury Steeple -	43 57 59 SE	144484 E.	476504 S
May Hill -		83 42 6 NE		
Malvern Hill -	Tewkesbury Steeple -	44 12 55 SE	118307 E.	448999 S
May Hill -		59 31 18 NE		
Malvern Hill -	Breedon Spire -	61 56 56 SE	127783 E.	434053 S
May Hill -		54 21 58 NE		
Malvern Hill -	Ledbury Steeple -	36 14 11 SW	59726 E.	432233 S
May Hill -		5 17 10 NE		
Malvern Hill -	Pershore Steeple -	87 37 35 NE	126605 E.	405043 S
May Hill -		45 10 23 NE		
Trelleg Beacon -	Trelleg Steeple -	85 6 38 NW	8967 W.	538657 S
Mynydd Mane -		71 44 58 NE		
Trelleg Beacon -	Lansdown Monument -	32 26 48 SE	69225 E.	655857 S
Mynydd Mane -		59 47 55 SE		
Garth Hill -	The highest part of Twymbarlum Mt. -	56 20 52 NE	92711 W.	581533 S
Mynydd Mane -		16 49 4 SW		
Garth Hill -	Llantrissant Steeple -	88 46 54 SW	157213 W.	612421 S
Ogmoor Down -		62 49 19 NE		
Mynydd Mane -	Beacons of Brecknock -	46 44 10 NW	169628 W.	487370 S
Llangeinor Mountain -		19 47 15 NE		
Mynydd Mane -	Pen-y-voel -	18 38 36 NE	58662 W.	478848 S
Llangeinor Mountain -		55 51 27 NE		
Llanellian, Denbighshire -	St. Elmo Summer House -	72 42 22 NE	150731 W.	38453 N
Garreg Mountain -		54 36 33 NW		
Llanellian, Denbighshire -	Llandonna Signal Staff -	75 43 47 NW	314396 W.	35886 N
Llanellian, Anglesea -		48 24 43 SE		
East end of R. Base -	St. Asaph Cathedral -	30 51 47 SE	165530 W.	13778 N
West end of R. Base -		65 21 45 SE		
East end of R. Base -	Rhuddlan Steeple -	19 59 43 SE	171485 W.	26149 N
West end of R. Base -		85 57 39 SE		
East end of R. Base -	Abergelŷ Steeple -	89 26 59 SW	196418 W.	24420 N
West end of R. Base -		1 29 25 SW		
East end of R. Base -	Cave Hill Signal Staff -	87 43 58 SW	205826 W.	23316 N
West end of R. Base -		64 13 29 SW		
Cyrn y Brain Mountain -	Trinity Spire, Chester -	48 15 37 NE	45830 W.	11597 S
Long Mountain -		12 21 22 NE		

Names of Stations and intersected Objects.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
		° ' "	Fees.	Feet.
Cyrn y Brain Mountain	Wia Wick Spire -	41 31 54 NE	19095 E	76307 N
Delamere Forest -		14 2 58 NE		
Cyrn y Brain Mountain	Neston Steeple -	15 4 17 NE	82859 W	24813 N
Garreg Mountain		87 34 43 SE		
Garreg Mountain	Bidston Lighthouse -	52 12 26 NE	84793 W	65137 N
Delamere Forest -		52 15 26 NW		
Garreg Mountain	St. Paul's, Liverpool	58 5 53 NE	67122 W	69015 N
Delamere Forest -		44 12 12 NW		
Heswell Hill -	Formby NW Landmark	1 21 17 NE	89140 W	117118 N
Billinge Beacon -		81 7 4 NW		
Heswell Hill -	Formby SE Landmark	6 8 39 NE	82865 W	116002 N
Billinge Beacon -		81 13 4 NW		
Heswell Hill -	Crosby Steeple -	16 6 57 NE	74261 W	98714 N
Billinge Beacon -		85 18 59 SW		
Heswell Hill -	Helbre Lighthouse -	39 12 46 NW	108440 W	62557 N
Billinge Beacon -		67 42 27 SW		
Heswell Hill -	Bebbington Spire -	76 25 1 NE	69440 W	46178 N
Billinge Beacon -		47 11 21 SW		
Heswell Hill -	Point of Air Lighthouse	79 24 24 NW	139006 W	49972 N
Billinge Beacon -		67 41 16 SW		
Heswell Hill -	Septon Spire -	24 46 4 NE	62188 W	103302 N
Billinge Beacon -		89 1 36 SW		
Heswell Hill -	Wavertree Steeple	61 26 23 NE	50264 W	63123 N
Billinge Beacon -		46 36 51 SW		
Heswell Hill -	Leasowes Lighthouse -	9 48 16 NW	95984 W	70160 N
Billinge Beacon -		69 5 45 SW		
Garreg Mountain -	Eastham Spire -	85 0 15 NE	60332 W	33495 N
Heswell Hill -		76 15 22 SE		
Heswell Hill -	Prescot Spire -	61 55 27 NE	26334 W	75445 N
Bellefield Hill -		60 58 33 NW		
Heswell Hill -	Everton Flag-staff -	40 53 22 NE	62160 W	74182 N
Bellefield Hill -		72 59 9 NW		
Billinge Beacon -	Warrington Steeple -	35 8 35 SE	23111 E	61814 N
Bellefield Hill -		1 19 57 NE		
Billinge Beacon -	St. Mary's Spire, Man-	85 6 17 SE	95174 E	95514 N
Bellefield Hill -	chester -	56 49 15 NE		
Billinge Beacon -	Standish Spire -	22 22 6 NE	5226 E	133363 N
Bellefield Hill -		11 39 15 NW		
Billinge Beacon -	North Meals Spire -	43 33 19 NW	59966 W	160206 N
Go-Hill -		17 36 28 NW		
Billinge Beacon -	Halsall Spire -	60 48 32 NW	57692 W	132851 N
Go-Hill -		48 36 25 NW		
Billinge Beacon -	Blackrod Steeple -	41 37 56 NE	21637 E	136190 N
Go-Hill -		80 42 17 NE		
Billinge Beacon -	Aughton Spire -	73 52 48 NW	50896 W	116931 N
Go-Hill -		15 53 7 SW		
Wittle Hill -	Knoll Hill -	39 48 25 SE	96570 E	155903 N
Billinge Beacon -		63 26 11 NE		
Boulsworth Hill -	Waller's Pleasure House	86 44 52 NW	66020 E	221105 N
Wittle Hill -		23 4 45 NW		

Names of Stations and intersected Objects.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Fect.	Fect.
Knoll Hill -	Bennington Steeple -	16 22 14 SE	106705 E	121208 N
Wittle Hill -		20 55 29 SE		
Bar Beacon -		82 41 53 NW		
Castle Ring -	Walsall Steeple -	32 31 52 SW	136080 E	
Bar Beacon -		74 59 51 SW		
Castle Ring -		17 12 18 SW		
Clay Hill -	Wednesbury Spire -	22 50 28 NW	147948 E	
Ashley Heath -		47 14 0 SW		
Bar Beacon -		87 1 43 NW		
Castle Ring -	Wolverhampton Spire	40 38 59 SW	16230 W	
Llanclian, Denbighshire		72 13 15 NE		
Garreg Mountain		57 27 24 NW		
Llanclian, Denbighshire	Mowl Fammau -	69 47 2 SE	125139 W	
Garreg Mountain		10 50 34 SE		
Go-Hill -		65 10 48 NE		
Beryl Hill -	Ormeau Spire -	18 26 23 SE	43245 W	
Go-Hill -		88 35 59 NE		
Beryl Hill -		31 40 36 SE		
Beryl Hill -	North Station on the Cliff near Blackpool	89 2 38 SW		
Ashurst Beacon -		32 54 18 NW		
Beryl Hill -		9 22 34 NE		
North Station -	Bispham Church Tower	32 2 41 NE		
Beryl Hill -		3 21 37 NW		
Black Comb -		25 27 15 SE		
Beryl Hill -	Poulton Church Tower	75 23 44 NE		
Black Comb -		25 20 58 SE		
Black Comb -		47 27 27 NE		
Ingleborough Hill -	Coniston Fell -	64 11 32 NW	112726 N	
Black Comb -		24 30 59 SE		
Ingleborough Hill -		77 12 15 SW		
Black Comb -	Peel Castle -	55 41 41 SE	101753 W	
The Calf -		23 21 51 SW		
Black Comb -		16 22 16 NE		
The Calf -	Lancaster Church Tower	74 21 6 NW	25786 W	
Black Comb -		7 5 27 NE		
Dent Hill -		86 29 26 SE		
Black Comb -	The Pillar -	27 48 33 NW	466268 N	
Dent Hill -		55 44 17 NW		
Dent Hill -		81 49 19 NE		
Scilly Bank -	Red Pike -	75 47 35 SE	475068 N	
Dent Hill -		57 49 39 NE		
Scilly Bank -		81 27 23 NE		
Dent Hill -	Grisdale Pike -	18 52 38 NW	499324 N	
Scilly Bank -		3 23 13 NW		
Dent Hill -		8 51 19 NW		
Crif-Fell -	Lighthouse, St. Bee's Head	15 11 54 SE	603982 N	
Scilly Bank -		43 55 16 SW		
Crif-Fell -		1 24 49 SW		
The Calf -	Pinnigant Hill -	36 24 24 SE	472925 N	
Ingleborough -		83 30 13 SE		

Names of Stations and intersected Objects.			Bearings.	Distance from Meridian.	Distance from Perpendicular.
				Fect.	Fect.
The Calf	-	Kirkby Lonsdale,	16 35 36 SW	18846 E	358472 N
Lugborough	-	Church Tower	72 31 32 NW		
The Calf	-	Wharfedale in Ingleton	25 1 16 SE	60567 E	367393 N
Lugborough	-	Fells	2 51 20 NW		
The Calf	-	Pennith Beacon	23 36 33 NW	12292 W	530622 N
Cross Fell	-		79 19 20 SW		
Cross Fell	-	Bow Fell	57 14 12 SW	102230 W	448018 N
High Pike	-		13 59 8 SW		
Cross Fell	-	Carrock Fell	88 17 0 SW	71283 W	537470 N
High Pike	-		59 49 0 SE		
Cross Fell	-	Cold Fell Pike	21 29 24 NW	14038 E	610484 N
High Pike	-		53 43 34 NE		
Cross Fell	-	Dafferside Beacon	10 7 14 NW	31287 E	584323 N
High Pike	-		69 25 59 NE		
Cross Fell	-	Saddle Back	79 0 44 SW	77075 W	517954 N
High Pike	-		4 15 32 SE		
Cross Fell	-	Nine Standards	26 33 34 SE	87372 E	450200 N
Water Crag	-		80 7 32 NW		
Cross Fell	-	Kilhope Law	51 15 5 NE	85468 E	575714 N
Water Crag	-		15 39 23 NW		
Criffell	-	Carlaveroc Castle	60 27 57 NE	176185 W	641404 N
High Pike	-		44 21 32 NW		
Cross Fell	-	Annan Spire	78 15 33 NE	120203 W	045137 N
High Pike	-		21 49 20 NW		
Cross Fell	-	Whin Fell	27 20 39 NE	120192 W	777799 N
Wisp Hill	-		66 35 48 NW		
Collier Law	-	Peel Hill Pike	35 41 34 NW	12213 E	247159 N
High Pike	-		25 41 5 NE		
Mordington Hill	-	Low Building on the	51 32 5 SE	212700 E	176120 N
Blackheddon	-	Staples	82 47 3 SE		
Mordington Hill	-	Blackhouse on the East	56 3 20 SE	219000 E	882440 N
Blackheddon	-	Staples	89 13 5 SE		
Mordington Hill	-	Barton Staff on Old	17 20 0 SE	184800 E	890925 N
Blackheddon	-	Law	74 59 59 NE		
Mordington Hill	-	Holy Island Castle	49 55 7 SE	185907 E	894730 N
Blackheddon	-		68 50 23 NE		
Mordington Hill	-	Kyloe Church Tower	30 12 15 SE	158325 E	889976 N
Blackheddon	-		16 40 37 NE		
Mordington Hill	-	Lowick Church Tower	18 5 31 SE	145119 E	837429 N
Blackheddon	-		69 34 42 NW		
Mordington Hill	-	N rham Castle	27 0 31 SW	110312 E	05102 N
Blackheddon	-		56 57 24 NW		
Mordington Hill	-	Hume Castle	57 17 47 SW	41423 E	892145 N
Blackheddon	-		85 28 1 NW		
Mordington Hill	-	Danse Spire	73 22 23 SW	70722 E	033512 N
Blackheddon	-		59 40 52 NW		
Mordington Hill	-	Blackadder Tower	68 54 22 SW	93157 E	033563 N
Blackheddon	-		52 12 23 NW		
Sayrs Law	-	Berwick upon Tweed,	78 37 55 SE	140540 E	130212 N
Blackheddon	-	Spire	18 19 27 NW		



Names of Stations and intersected Objects.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Fath.	Fath.
Says Law - - -	Manchester Hill, Signal	85 43 57 SE	122424 E	949631 N
Blackheddon - - -	Staff - - -	27 3 15 NW		
Says Law - - -	Elden Hills, highest	5 49 55 SW	6711 W	861801 N
Mordington Hill - - -	Point - - -	58 3 36 SW		
Says Law - - -	Hedghope Pile -	41 24 40 SE	123518 E	822075 N
Mordington Hill - - -	- - -	1 21 7 SW		
Says Law - - -	West Lomond Top	41 6 8 NW	121277 W	1104614 N
Lumsdane Hill - - -	- - -	60 57 7 NW		
Says Law - - -	St. Monance Spire -	8 58 19 NW	17367 W	1083591 N
Lumsdane Hill - - -	- - -	47 4 34 NW		
Says Law - - -	Pittenweem Spire -	5 4 11 NW	8583 W	1090973 N
Lumsdane Hill - - -	- - -	44 11 22 NW		
Says Law - - -	West Anstruther Spire	2 52 56 NW	5732 W	1095578 N
Lumsdane Hill - - -	- - -	41 41 33 NW		
Says Law - - -	East Anstruther Spire	2 34 58 NW	3045 W	1096257 N
Lumsdane Hill - - -	- - -	41 19 58 NW		
Says Law - - -	Kilrenny Spire -	1 22 11 NW	215 W	1099989 N
Lumsdane Hill - - -	- - -	39 37 51 NW		
Says Law - - -	High Spire in Crail -	3 24 33 NE	12209 E	1110310 N
Lumsdane Hill - - -	- - -	33 39 56 NW		
Says Law - - -	High Building, near	4 37 30 NE	15948 E	1116465 N
Lumsdane Hill - - -	Crail - - -	31 18 30 NW		
Says Law - - -	Lighthouse on the Isle	10 36 8 NE	26336 E	1082304 N
Lumsdane Hill - - -	of May - - -	35 24 7 NW		
Says Law - - -	Bas Rock - - -	4 10 26 NE	9326 E	1042918 N
Lumsdane Hill - - -	- - -	55 9 58 NW		
Says Law - - -	Signal Staff on North	0 52 12 NW	5714 W	1032249 N
Lumsdane Hill - - -	Berwick Law - -	63 45 53 NW		
Says Law - - -	Signal Staff on Dulau	71 37 26 NE	93599 E	988571 N
Lumsdane Hill - - -	- - -	32 2 34 NW		
Says Law - - -	Building on Hill, near	25 53 55 SW	44566 W	860237 N
Wisp Hill - - -	Stow - - -	7 11 57 NE		
Says Law - - -	Soutra Hill Pile -	89 55 45 NW	15738 W	958557 N
Wisp Hill - - -	- - -	11 49 15 NE		

*Meridian of Moel Rhyddlad.*

Margam Down	St. Ann's Chapel, Lundy	54 21 18 SW	25138 W	803593 S
Cefn Bryn	Isle - - -	37 47 51 SE		
Margam Down	Kilvey Windmill	72 46 21 NW	143207 E	637.43 S
Cefn Bryn	- - -	70 9 32 NE		
Cefn Bryn	Painbree Steeple	38 10 12 NW	62192 W	616939 S
Marios Beacon	- - -	75 10 28 SE		
Cefn Bryn	Tenby Spire	75 21 36 NW	34139 W	622876 S
Marios Beacon	- - -	40 28 36 SW		
Cefn Bryn	Crunwell Steeple	63 55 24 NW	25529 W	598091 S
Marios Beacon	- - -	86 18 9 SW		

Names of Stations and intersected Objects.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Feet.	Feet.
Cefn Bryn -	Marros Steeple -	59 17 50 NW	11233 W	594209 S
Lannon -		89 41 23 SW		
Marros Beacon -	Thelwelly Spire -	88 28 20 SE	54908 E	599026 S
Lannon -		81 16 24 SW		
Marros Beacon -	Woodhouse Caddy Isle	24 33 27 SW	30743 W	537538 S
Lannon -		70 0 23 SW		
Marros Beacon -	St. Ann's Lighthouse,	80 41 40 SW	142092 W	518390 S
Preccelly Top -	Millerd Haven -	43 37 25 SW		
Marros Beacon -		66 49 32 SW	100049 W	534818 S
Preccelly Top -	Warren Spire -	23 40 38 SW		
Marros Beacon -		63 49 42 SW	87459 W	534150 S
Preccelly Top -	St. Petrox Steeple -	18 9 58 SW		
Plumstone Down -		58 29 44 NW	79930 W	504860 S
Plumstone Down -	Nipple Rock -	34 5 14 NE		
Preccelly Top -		33 7 39 SE	95794 W	571820 S
Preccelly Top -	Haverfordwest Spire	40 41 45 SE		
Plumstone Down -		40 22 47 SW	93808 W	573164 S
Preccelly Top -	Plandergest Steeple	38 22 20 SE		
Plumstone Down -		70 41 30 NW	116723 W	499665 S
Preccelly Top -	Pencira	6 4 17 NW		
Plumstone Down -		52 10 57 SW	119775 W	557733 S
Preccelly Top -	Roch Castle	63 1 58 SW		
Preccelly Top -	Summer House in Lord	21 48 3 SW	74558 W	530752 S
Plumstone Down -	Alford's Park	50 41 52 SE		
St. Ann's Hill -	Stanton Steeple -	69 3 11 NE	105970 W	501179 S
Preccelly Top -		35 43 52 SW		
St. Ann's Hill -	Johnston Steeple -	60 40 10 NE	107584 W	527544 S
Preccelly Top -		35 48 25 SW		
Plumstone Down -	St. T. Wall's Steeple	11 20 52 SE	94409 W	534330 S
St. Ann's Hill -		66 32 51 SE		
Plumstone Down -	Gwynn Isle -	63 57 41 S V	110387 W	599817 S
St. Ann's Hill -		78 19 57 NW		
Plumstone Down -	Small's Light House	70 2 19 SW	754035 W	603000 S
St. Ann's Hill -		84 17 26 NW		
Plumstone Down -	St. Daniel's Spire -	20 20 35 SE	84046 W	624506 S
St. Ann's Hill -		79 48 23 SE		
Highgate Mountain -	Habberston Steeple	73 24 51 NE	114673 W	606696 S
St. Ann's Hill -		52 39 46 NW		
Highgate Mountain -	Millford Steeple -	78 41 25 NE	108770 W	508038 S
Plumstone Down -		47 24 19 NW		
Highgate Mountain -	Mote Steeple -	85 13 39 NE	60591 W	542414 S
Plumstone Down -		18 23 12 NE		
Highgate Mountain -	Castel Bath Steeple	60 51 26 NE	74577 W	530692 S
Preccelly Top -		8 18 14 NE		
Highgate Mountain -	Maenclochog Steeple	14 19 31 SW	54058 W	535169 S
Rhw Mountain -		20 40 56 NE		
Meel Rhyddlad -	Rivel Mountain -	39 34 15 NE	24725 E	147200 S
Llwydiar Mountain -		9 32 6 SE		
Llanellian Mountain -	Penmaen Mawr -	86 28 20 SE	131314 E	42702 S
		56 30 17 SE		

Names of Stations and intersected Objects.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Feet.	Feet.
Llwydiart Mountain	Coedana Steeple -	74 45 14 NW	43104 E	24199 S
Llanelian Mountain		19 37 24 SW		
Llwydiart Mountain		20 44 32 NW		
Llanelian Mountain	Ynys Gadarn -	64 51 41 SE	64274 E	3524 S
Llwydiart Mountain		16 46 31 NW		
Llanelia Mountain		45 53 45 SE		
Llanelian Mountain	Ynys traeth Bychan	83 35 44 NW	70409 E	7256 S
Moel Rhyddlad -		39 42 8 NW		
Llanelian Mountain		55 25 15 SW		
Moel Rhyddlad -	Amlwch Steeple	87 59 54 NE	45907 E	1604 N
Llanelian Mountain		83 39 1 NW		
Moel Rhyddlad -		5 8 43 NW		
Moel Rhyddlad -	West Mouse -	77 27 55 NE	1286 W	14281 N
Llanelian Mountain		17 4 7 NW		
Llanelian Mountain		18 54 28 NE		
Moel Rhyddlad -	Point Elianus Signal	76 9 8 NE	56628 E	13960 N

ART. IV. *Bearings and Distances of several Church Steeples, and other Objects of Note, in the Fourth Section of the present Work, from the Parallels and Perpendiculars to their respective Meridians.*

*Meridian of Moel Rhyddlad.*

New Inn Hill -	Brenin Fawr -	89 3 59 NW	15604 W	509105 S
Pfcelly Top -		68 57 53 NE		
Capel Kynon -		47 33 59 SW		
Pfcelly Top -	Ferwig Steeple -	23 42 55 NE	23741 W	461253 S
Brenin Fawr -		9 39 5 NW		
Pfcelly Top -		15 56 25 NE		
Brenin Fawr -	Barrow near Pantseison	32 1 35 NW	37154 W	474652 S
Brenin Fawr -		7 8 35 NW		
Barrow near Pantseison		14 13 25 NE		
Brenin Fawr -	Cardigan Island, highest Point	4 50 55 NE	32227 W	455210 S
Barrow near Pantseison		49 34 35 SE		
Pfcelly Top -		31 55 25 NE		
Brenin Fawr -	Warren Bank -	1 27 5 NW	16650 W	467746 S
Brenin Fawr -		13 2 35 NW		
Warren Bank -		55 46 25 SW		
Plumstone Down -	Cardigan Steeple	68 37 31 NW	24203 W	472883 S
St. Ann's Hill -		12 10 3 NW		
St. Ann's Hill -		19 6 51 N		
Penberry Rock -	Llaethy Rock -	65 7 8 SW	167200 W	537105 S

Names of Stations and intersected Objects.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Feet.	Feet.
Penberry Rock -	St. David's Cathedral	19 36 38 SW	162471 W	545378 S
Llaethty Rock -		29 45 22 SE		
Penberry Rock -	Bishop and his Clerks	81 15 53 SW	189168 W	537627 S
St. David's Cathedral	Highest point of N. Isl	73 48 37 NW		
Plumstone Down -	Ramsey Island, highest point	88 53 0 SW	180391 W	552486 S
St. Ann's Hill -		32 51 22 NW		
New Inn Hill -	Llangynog Mountain	35 59 50 SW	31920 E	569862 S
Precelly Top -		60 19 8 SE		
Marros Beacon -	Ludchurch Steeple -	67 11 24 NW	33106 W	588464 S
Highgate Mountain		55 29 11 NE		
Marros Beacon -	Worms Head, West Point	43 37 33 SE	49160 E	661669 S
Lannon -		30 53 26 SW		
Worms Head -	Laugharne Steeple	21 6 19 NW	19500 E	584824 S
Llangynog Mountain		44 43 25 SE		
New Inn Hill -	Llansaint Hill, Barrow	14 41 32 SW	53681 E	591834 S
Llangynog Mountain		11 31 55 SE		
Llansaint Hill -	Llansanbyhan Castle	79 51 58 NW	35754 E	588622 S
Llansaint Hill -		58 51 8 NE		
Llangynog Mountain	Mancha Hill -	81 25 37 SE	78403 E	576877 S
Mancha Hill -	Carmarthen (House at west end)	55 23 49 NW	49356 E	556836 S
Llangynog Mountain		53 13 16 NE		
Brenin Fawr -	Moelfre Barrow -	82 26 7 NE	24613 E	503762 S
Capel Kynon -		17 26 7 SW		
Moelfre Barrow -	Bettws Eion -	13 50 26 NW	15312 E	466020 S
Capel Kynon -		74 48 7 SW		
Capel Kynon -	Penboir Church -	3 37 0 SW	37733 E	502753 S
Moelfre Barrow -		84 51 47 NE		
New Inn Hill -	Crug Edrid -	40 48 54 NE	92661 E	490111 S
Capel Kynon -		60 41 21 SE		
Crug Edrid -	Llanwenog Steeple	36 29 14 NW	78454 E	470702 S
New Inn Hill -		4 59 46 NE		
Crug Edrid -	Brechva Mountain	14 14 21 SW	83387 E	526659 S
New Inn Hill -		27 35 19 SE		
Crug Edrid -	Dinas Rock -	70 2 20 SE	123655 E	501370 S
Brechva Mountain		57 52 18 NE		
Margam Down -	Trecastle Beacon, New Station	1 6 59 NW	189549 E	544058 S
Kilvey Windmill -		26 16 17 NE		
Kilvey Windmill -	Carreg Glwydd -	13 40 9 NE	162514 E	558560 S
Margam Down -		17 9 48 NW		
Margam Down -	Mumbles Lighthouse	82 45 18 SW	131387 E	660632 S
Kilvey Windmill		27 31 1 SW		
Kilvey Windmill -	Swansea Castle -	59 14 27 SW	138006 E	641038 S
Margam Down -		77 27 51 NW		
Carreg Glwydd -	Trechrig Mountain	47 47 43 NW	148610 E	542442 S
Trecastle Beacon -		87 43 5 NW		
Trechrig Mountain	St. Mary on the Hill, Llandoverly -	27 54 39 NE	170153 E	501770 S
Trecastle Beacon -		24 38 21 NW		
Cefn Bryn -	Llanelli Steeple -	7 33 38 NW	87932 E	618250 S
Penbree Steeple -		87 5 59 SE		

Names of Stations and intersected Objects.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Feet.	Feet.
Cefn Bryn -	Rosilly Barrow -	{ 87 21 22 SW	60877 E	57535 S
Llanelly Steeple -		{ 34 34 48 SW		
Carreg Glwydd -	Lannon Steeple -	{ 62 47 14 SW	97755 E	591864 S
Margam Down -		{ 56 57 6 NW		
Kilvey Windmill -	Tre Carn Issa -	{ 0 43 16 NE	144152 E	562872 S
Margam Down -		{ 27 48 29 NW		
Trechrig Mountain -	Great Mountain -	{ 57 3 4 SW	110044 E	567433 S
Tre Carn Issa -		{ 82 22 47 SW		
Trechrig Mountain -	Taliaris Pigeon House -	{ 51 29 26 NW	129922 E	527578 S
Great Mountain -		{ 26 30 4 NE		
Trechrig Mountain -	Llandilo Steeple -	{ 81 53 30 SW	125565 E	545725 S
Taliaris Pigeon House -		{ 13 30 30 SW		
Great Mountain -	Llangadock Steeple -	{ 42 57 23 NE	150069 E	524452 S
Trechrig Mountain -		{ 4 39 4 NE		
Great Mountain -	Nelson's Tower -	{ 50 58 33 NW	96970 E	556830 S
Trechrig Mountain -		{ 74 25 49 SW		

## Meridian of Delamere Forest.

Llangeinor Mountain -	Margam Down -	{ 57 10 43 SW	231901 W	595318 S
Ogmoor Down -		{ 27 13 55 NW		
Ogmoor Down -	St. Mary Hill Steeple -	{ 60 41 36 NE	86148 W	626167 S
Margam Down -		{ 56 0 51 SE		
Ogmoor Down -	Signal Staff, Newton Down -	{ 42 58 52 NW	224143 W	623282 S
Margam Down -		{ 15 30 18 SE		
Garth Hill -	Carn Vawr -	{ 59 10 47 NW	188387 W	582274 S
Ogmoor Down -		{ 20 12 12 NE		
Garth Hill -	Signal Staff, Stalling Downs -	{ 42 16 52 SW	167357 W	643750 S
Ogmoor Down -		{ 83 47 10 SE		
Garth Hill -	St. Hilary Steeple -	{ 39 55 53 SW	166836 W	645865 S
Ogmoor Down -		{ 81 3 9 SE		
Newton Down -	Kenfig Steeple -	{ 65 47 48 NW	235819 W	618034 S
Margam Down -		{ 9 47 19 SW		
Ogmoor Down -	Bridgend Steeple -	{ 18 22 36 NE	204292 W	624023 S
St. Mary Hill Steeple -		{ 83 15 54 NW		
Ogmoor Down -	Llaleston Steeple -	{ 14 52 36 NW	213173 W	624694 S
Bridgend Steeple -		{ 85 41 58 SW		

## Meridian of Black Down

Brent Knoll -	Bridgewater Spire -	{ 16 46 1 SW	104718 W	161282 N
Bagborough -		{ 81 37 56 NE		
Brent Knoll -	Huntspill Steeple -	{ 32 58 49 SW	102600 W	189170 N
water Spire -		{ 4 20 28 NE		

Names of Stations and Intersected Objects.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Feet.	Feet.
Bridgewater Spire	Cannington	56 15 58 NW	121662 W	172589 N
Bagborough		56 7 23 NE		
Bridgewater Spire	Staple Hill	15 18 34 SW	122980 W	94570 N
Bagborough		22 30 10 SE		
Bridgewater Spire	Castlineroach	6 41 45 SW	112862 W	91913 N
Staple Hill		75 17 1 SE		
Bagborough	Sampford	15 8 19 SW	164262 W	94763 N
Brompton Ralph		14 46 15 SE		
Haddon Beacon	Newts Down	4 0 48 SE	210748 W	75923 N
Bagborough		38 27 50 SW		
Haddon Beacon	Christ Cross	0 52 27 SE	213587 W	56380 N
Newts Down		8 15 40 SW		
Christ Cross	Whitstone Station	42 28 44 SW	245402 W	21578 N
Newts Down		32 31 31 SW		
Christ Cross	Kentisbeare	73 2 25 NE	170136 W	69597 N
Sampford		13 8 22 SW		
Bagborough	Dumpdon	2 20 6 SE	143810 W	52733 N
Staple Hill		26 28 23 SW		
Castlineroach	Yartcombe	25 36 18 SW	124299 W	68046 N
Staple Hill		2 50 41 SW		
Dumpdon	Harner Hill	75 17 18 SE	119142 W	46252 N
Yartcombe		13 18 1 SE		
Dumpdon	Combe Rawleigh	75 15 54 SW	153993 W	50053 N
Harner Hill		83 46 39 NW		
Sampford	Gaddon Hill	37 36 28 SW	179103 W	75496 N
Kentisbeare		56 39 13 NW		
Sampford	Culmstock	14 10 57 SW	165710 W	89032 N
Gaddon Hill		44 41 47 NE		
Christ Cross	Obelisk, Haldon	8 25 29 SW	225496 W	24031 S
Whitstone		23 34 48 SE		
Obelisk	Haldon, Old Station	41 54 6 NW	238636 W	9386 S
Whitstone		12 19 36 SE		
Haldon Old Station	Haldon, New Station	57 45 18 SE	230291 W	14650 S
Whitstone		22 38 32 SE		
Haldon New Station	Exeter Cathedral	6 8 42 NE	227130 W	14710 N
Whitstone		69 24 33 SE		
Sampford	Wherry Farm	10 28 39 SW	170142 W	62966 N
Kentisbeare		0 2 54 SW		
Sampford	Upcot Pen	8 18 14 SW	169178 W	61083 N
Wherry Farm		27 8 8 SE		
Sampford	Woolford Lodge	12 7 23 SE	154194 W	47911 N
Upcot Pen		48 40 30 SE		
Woolford Lodge	Hembury Fort	83 4 29 NW	164701 W	49190 N
Upcot Pen		20 38 52 SE		
Hembury Fort	North Ottery Moor	16 19 39 SE	158644 W	28522 N
Woolford Lodge		12 55 36 SW		
Hembury Fort	South Ottery Moor	0 48 37 SE	165248 W	10354 N
North Ottery Moor		19 58 29 SW		
South Ottery Moor	West Ottery Moor	55 6 31 NW	181493 W	21684 N
North Ottery Moor				

Names of Stations and intersected Objects.		Bearings	Distance from Meridian.	Distance from Perpendicular.
			Fect.	Fect.
Huntspill Steeple	Berrow Steeple	9 15 11 NW	106334 W	212082 N
Brent Knoll		72 39 11 NW		
Huntspill Steeple	Burnham Steeple	0 59 11 NW	102823 W	202085 N
Brent Knoll		66 37 49 SW		
Huntspill Steeple	Mark Steeple	72 24 49 NE	77710 W	197059 N
Brent Knoll		52 14 11 SE		
Huntspill Steeple	Woolavington Steeple	48 54 11 SE	883329 W	176721 N
Brent Knoll		4 45 11 SE		
Huntspill Steeple	North Petherton Steeple	6 13 15 SW	107056 W	148284 N
Cannington		30 59 45 SE		
North Petherton Steeple	Weston in Zoyland Steeple	73 30 15 NE	86952 W	154238 N
Cannington		62 7 45 SE		
North Petherton Steeple	Burrow Mount Chapel	70 30 45 SE	84424 W	140274 N
Cannington		49 2 45 SE		
Huntspill Steeple	Enmore Steeple	31 52 15 SW	123651 W	155311 N
Cannington		6 34 15 SW		
Brompton Ralph	Black Hill	56 48 27 NW	206783 W	168592 N
Haddon Beacon		12 38 33 NE		
Black Hill	Lype Hill	56 54 33 SW	218634 W	160869 N
Haddon Beacon		7 54 27 NW		
Black Hill	Grabbist Hill	39 11 57 NW	219508 W	184192 N
Lype Hill		2 8 27 NW		
Black Hill	St. Decuman's Steeple	66 51 33 NE	181189 W	179531 N
Grabbist Hill		83 3 57 SE		
Black Hill	Minehead Steeple	15 35 57 NW	213508 W	192666 N
Grabbist Hill		35 18 3 NE		
Grabbist Hill	Cutcombe Steeple	18 43 33 SW	225672 W	167783 N
Lype Hill		42 56 27 NW		
Haddon Hill	Heydon Hill	86 48 45 SE	190325 W	131649 N
Brompton Ralph		31 19 5 SW		
Heydon Hill	Bampton	40 49 15 SW	206806 W	112570 N
Haddon Beacon		21 15 45 SE		
Bampton	Honiton Down	80 52 45 SE	189659 W	109818 N
Haddon Beacon		47 15 45 SE		
Bampton	Bampton Tree	78 34 45 NW	221006 W	115440 N
Haddon Beacon		19 35 5 SW		
Bampton Tree	West Anstey	56 13 55 NW	247601 W	133224 N
Haddon Beacon		89 37 55 NW		
Bampton Tree	Dulverton Station	36 6 55 NW	231460 W	129772 N
Haddon Beacon		79 1 5 SW		
Heydon Hill	Brompton Regis	68 48 45 NW	218174 W	142445 N
Haddon Beacon		19 53 45 NW		
Bampton	Morebath Steeple	49 32 45 NW	217030 W	121288 N
Honiton Down		67 15 45 NW		
Dulverton Station	Dulverton Steeple	60 18 9 SW	232985 W	128904 N
Bampton Tree		41 39 55 NW		
Bampfild	Holcombe Rogus	69 51 14 NW	183365 W	101771 N
Culmstock		54 11 13 NW		
Culmstock	Uffculme Steeple	59 33 21 SW	180941 W	80080 N
Gaddon Hill		21 49 55 NW		

Names of Stations and intersected Objects.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Feet.	Feet.
Bagborough -	Wellington Steeple	9 29 1 SW	155796 W	108143 N
Staple Hill -		67 31 32 NW		
Bagborough -	St. Mary's, Taunton	31 20 35 SE	127025 W	120511 N
Staple Hill -		8 51 49 NW		
Staple Hill -	Cothelstone Lodge	17 56 47 NW	139939 W	146927 N
Bagborough -		45 10 47 SE		
Staple Hill -	Lady Chatham's Obelisk	57 44 27 NE	78423 W	122690 N
Bagborough -		65 8 23 SE		
Brompton Ralph -	Bishop's Lydiard	67 41 44 SE	147093 W	137297 N
Bagborough -		2 53 5 SE		
Brompton Ralph -	Wiveliscombe Steeple	10 59 58 SE	175011 W	130234 N
Bagborough -		47 35 5 SW		
Wellington Steeple	Milverton Steeple	21 28 32 NW	162178 W	124366 N
Staple Hill -		52 49 32 NW		
Bagborough -	Combe Florey Steeple	20 20 55 SW	153120 W	141070 N
Brompton Ralph -		70 10 54 SE		
Wellington Steeple	Norton Fitzwarren	47 25 28 NE	37623 W	124839 N
Milverton Steeple -		88 53 28 NE		
Wellington Steeple	Langford Budville	12 41 28 NE	153247 W	119460 N
Milverton Steeple -		61 13 32 SE		
Wellington Steeple	Buckland Steeple	82 48 32 SE	145118 W	106794 N
Milverton Steeple -		44 9 32 SE		
Wellington Steeple	Hill Farence	35 2 28 NE	17184 W	120424 N
Milverton Steeple -		75 16 32 SE		
Castlineroach -	Fivehead Steeple	48 46 43 NE	85394 W	115977 N
Staple Hill -		60 20 18 NE		
Castlineroach -	Curry Mallet Steeple	50 39 32 NE	92465 W	108631 N
Staple Hill -		65 15 42 NE		
Castlineroach -	West Hatch Steeple	14 51 32 NE	108366 W	108857 N
Staple Hill -		45 39 3 NE		
Castlineroach -	Ilton Steeple	78 37 59 NE	86456 W	97221 N
Staple Hill -		85 50 59 NE		
Castlineroach -	Thorne Falcon Steeple	8 6 59 NE	109096 W	118316 N
Staple Hill -		30 18 59 NE		
Culmstock -	Tolmpton Steeple	47 40 34 SW	194455 W	62856 N
Kentesbeer -		74 30 41 SW		
Hembury Fort -	St. Mary Ottery Steeple	10 7 52 SW	169032 W	24946 N
North Ottery Moor		71 0 6 SW		
Hembury Fort -	Bradninch Steeple	84 26 35 NW	201791 W	52798 N
North Ottery Moor		60 38 5 NW		
North Ottery Moor	Honiton Chapel	38 45 5 NE	147802 W	42032 N
Hembury Fort -		67 2 24 SE		
Dumpton -	Widworthy	37 19 18 SE	30745 W	35592 N
Harner Hill -		47 25 42 SW		
Widworthy -	Hawk Church	82 4 42 NE	88906 W	41412 N
Harner Hill -		80 54 18 SE		
Widworthy -	Beer Signal Staff	2 3 18 SE	29208 W	884 N
Harner Hill -		12 30 42 SW		
Christcross -	Newton St. Cyrus Steeple	48 50 58 SW	141008 W	32417 N
Whitestone -		22 3 36 NE		



Names of Stations and intersected Objects.			Bearings.	Distance from Meridian.	Distance from Perpendicular.
				Feet.	Feet.
Christcross	-	Gernseys Gazebo	72 40 24 NE	168586 W	70421 N
Whitestone	-		57 32 54 NE		
Christcross	-	Woodbury Signal Staff	18 16 29 SE	185977 W	22578 S
Whitestone	-		53 23 3 SE		
Black Down	-	Ninebarrow Down	81 27 12 SE	125374 E	18843 S
Bullbarrow	-		42 28 53 NW		
Ninebarrow Down	-	Wingreen	10 31 28 NW	101588 E	109190 N
Bullbarrow	-		43 58 8 NE		
Wingreen	-	Trinity Steeple, Shaftsbury	70 19 50 NW	80662 E	16684 N
Bullbarrow	-		25 15 10 SW		
Wingreen	-	Duncliffe Hill	79 16 50 NW	69067 E	15347 N
Bullbarrow	-		15 26 10 NE		
Wingreen	-	Melbury Hill	79 27 10 SW	84606 E	106030 N
Bullbarrow	-		33 38 10 NE		
Wingreen	-	Badbury Rings	12 56 50 SE	114868 E	51400 N
Bullbarrow	-		82 28 50 SE		
Wingreen	-	Ringwood Steeple	55 40 0 SE	174246 E	59564 N
Bullbarrow	-		89 57 50 NE		
Wingreen	-	Horton Gazebo	37 36 0 SE	136518 E	63832 N
Bullbarrow	-		87 0 0 NE		
Wingreen	-	Bellchalwell Telegraph	45 9 10 SW	60882 E	68700 N
Trinity Steeple	-		22 21 40 SW		
Wingreen	-	Hamilton Hill	46 8 40 SW	74932 E	83578 N
Trinity Steeple	-		9 45 10 SW		
Wingreen	-	West Knoyle Steeple	28 52 50 NW	79833 E	148630 N
Trinity Steeple	-		1 24 50 NW		
Wingreen	-	Kingscotes	50 24 50 NW	82259 E	25172 N
Trinity Steeple	-		10 55 10 NE		
Wingreen	-	Pen Selwood Steeple	57 54 10 NW	45897 E	144118 N
Bradley Knoll	-		25 11 50 SW		
Wingreen	-	Alfred's Tower	51 32 10 NW	42303 E	156283 N
Bradley Knoll	-		57 43 50 SW		
Wingreen	-	Fonthill Abbey	4 5 10 NW	99165 E	143074 N
Bradley Knoll	-		63 40 10 SE		
Wingreen	-	Blandford Telegraph	0 31 10 SW	101250 E	71876 N
Bellchalwell Telegraph	-		85 30 10 NE		
Trinity Steeple	-	Gillingham Steeple	57 4 50 NW	62478 E	128431 N
Bullbarrow	-		7 18 10 NE		
Horton Gazebo	-	Pistle Down Telegraph	54 50 0 NE	156801 E	78122 N
Wingreen	-		60 38 0 SE		
Wingreen	-	Chalbury Telegraph	34 23 20 SE	132225 E	64426 N
Badbury Rings	-		53 5 50 NE		
Badbury Rings	-	Wimborne Steeple	55 58 10 SE	129557 E	41485 N
Chalbury Telegraph	-		6 37 50 SW		
Wingreen	-	Pentridge Hill	73 13 0 SE	139181 E	97852 N
Pistle Down Telegraph	-		41 46 0 NE		
Trinity Steeple	-	Sturminster Steeple	38 43 10 SW	56763 E	86923 N
Bullbarrow	-		6 29 10 NE		
Wingreen	-	Caishmoor Mill	40 41 0 SE	110781 E	86862 N
Pentridge Hill	-		59 9 0 SW		

Names of Stations and intersected Objects.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Feet.	Feet.
Wingreen -	Cranborne Steeple	36 0 SE	144148 E	85209 N
Pentridge Hill -		27 0 SE		
Wingreen -	Wardour Castle -	13 10 NE	102387 E	129830 N
Kingstettes -		58 10 NE		
Trinity Steeple	Mere Steeple -	50 50 NW	63876 E	147085 N
Gillingham Steeple		17 10 NE		
Trinity Steeple -	Hinton Steeple, Dorset	55 10 SW	56316 E	93954 N
Sturminster Steeple		37 50 NW		
Trinity Steeple	Iwerne Minster -	3 50 SE	83088 E	88846 N
Hinton Steeple -		11 50 SE		
Wingreen -	Christ Church -	17 20 SE	179351 E	17461 N
Ninebarrow Down		4 30 NE		
Ninebarrow Down	Poole Steeple -	19 40 NE	129630 E	10246 N
Christ Church		44 30 SW		
Black Down -	Wareham Steeple -	34 50 SE	102508 E	750 S
Ninebarrow Down		38 50 NW		
Christ Church -	Brownsea Castle -	53 30 SW	137005 E	1120 N
Ninebarrow Down		14 0 NE		
Christ Church -	Poole Heath -	8 0 SW	142022 E	12966 N
Brownsea Castle		58 30 NE		
Christ Church -	Stutland Signal Staff	34 0 SW	141641 E	19512 S
Poole Heath -		40 0 SW		
Black Down -	Wyke Regis Steeple -	57 30 SE	16321 E	32088 S
Ninebarrow Down		4 30 SW		
Black Down -	Dorchester Steeple. -	57 10 NE	25974 E	10521 N
Ninebarrow Down		32 30 NW		
Black Down -	Ridgeway Station -	35 50 SE	21890 E	6030 S
Dorchester Steeple		51 40 SW		
Black Down -	Portland Lighthouse	38 50 SE	21563 E	60396 S
Ridgeway Station -		20 40 SW		
Ridgeway Station -	Lulworth Flagstaff -	59 0 SE	53951 E	21677 S
Dorchester Steeple		59 20 SE		
Black Down -	Godmanstone Down -	36 40 NE	12410 E	28391 N
Dorchester Steeple		11 50 NW		
Black Down -	Aggerdon Hill -	23 20 NW	21314 W	21027 N
Godmanstone Down		41 10 SW		
Black Down -	Abbotsbury Signal Staff	23 40 SW	17569 W	4578 S
Aggerdon Hill -		19 20 SW		
Abbotsbury, Sta	Shipton Beacon -	8 20 NW	35022 W	14711 N
Aggerdon Hill		15 40 SW		
Shipton Beacon	Puncknoll. -	2 20 SE	25740 W	437 N
Aggerdon Hill		7 40 SW		
Bullbarrow	Wincanton Steeple -	42 50 SW	31148 E	134392 N
Duncliffe Hill		19 50 NW		
Trinity Steeple	Henstridge Steeple -	30 10 SW	35240 E	105791 N
Hinton Steeple		40 50 NW		
Pilsdon Hill	Montacute's Signal Staff	1 40 NE	39912 W	96134 N
Mintern -		10 20 NW		
Pilsdon Hill -	Pen Hill -	43 40 NE	32182 W	69515 N
Montacute's Signal Staff		11 20 SE		

Names of Stations and intersected Objects.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Feet.	Feet.
Pilsdon Hill	Barrow Hill	0 11 20 NW	65980 W	106259 N
Montacute's Staff		68 47 20 NW		
Barrow Hill	South Petherton	29 15 20 SE	59846 W	95283 N
Montacute's Staff		87 32 40 SW		
Mintern	Newton Summer House	41 0 20 NW	17204 W	91144 N
Ash Beacon		40 39 40 SW		
Mintern	Glastonbury Tor	22 40 20 NW	34311 W	187168 N
Ash Beacon		38 48 50 NW		
Barrow Hill	Ilchester Steeple	74 2 10 NE	30275 W	116472 N
Montacute's Staff		25 21 40 NE		
Pilsdon Hill	Warren Signal Staff	4 56 20 NW	68317 W	73365 N
Pen Hill		83 55 20 NW		
Newton Summer House	Leweston Hill	68 32 20 SE	1788 E	83677 N
Ash Beacon		6 18 40 SW		
Leweston Hill	Yetminster Steeple	46 17 40 SW	6690 W	75572 N
Newton Summer House		34 1 20 SE		
Yetminster Steeple	Sherborne Steeple	36 22 40 NE	7480 E	94808 N
Leweston Hill		27 4 40 NE		
Newton Summer House	Yeovil Steeple	43 22 20 NW	19208 W	93266 N
Leweston Hill		65 27 20 NW		
Pilsdon Hill	Broad Windsor	57 31 40 NE	57945 W	48937 N
Warren Signal Staff		23 0 20 SE		
Pilsdon Hill	Winyard's Gap	60 16 40 NE	39825 W	58769 N
Warren Signal Staff		62 52 20 SE		
Winyard's Gap	Crewkerne Steeple	52 34 20 NW	57554 W	72337 N
Warren Signal Staff		84 32 20 SE		
Beacon Hill	Clay Hill Barrow	86 56 50 NW	72590 W	188636 N
Bradley Knoll		35 23 10 NE		
Bradley Knoll	Milk Hill	49 59 20 NE	159541 E	251938 N
Beacon Hill		23 25 0 NW		
Bradley Knoll	Frome Spire	5 22 50 NW	52390 E	198267 N
Clay Hill Barrow		64 29 50 NW		
Bradley Knoll	Whatley Spire	28 1 50 NW	38243 E	197178 N
Clay Hill Barrow		76 1 50 NW		
Bradley Knoll	Leigh Steeple	44 35 50 NW	24550 E	196094 N
Clay Hill		81 10 50 NW		
Bradley Knoll	Buckland Steeple	13 17 50 NW	45011 E	209279 N
Clay Hill		53 10 50 NW		
Milk Hill	Red Horn Clump	23 58 0 SW	446689 E	223025 N
Beacon Hill		46 36 0 NW		
Milk Hill	Pewsey Steeple	55 26 0 SE	178920 E	239582 N
Red Horn, Clump		64 14 0 NE		
Milk Hill	Devizes Steeple	75 58 0 SW	127153 E	243841 N
Red Horn Clump		43 11 0 NW		
Red Horn Clump	Chittern Windmill	30 22 0 SW	125890 E	187518 N
Beacon Hill		85 24 0 NW		
Clay Hill	Steeple Ashton	28 39 10 NE	94569 E	228840 N
Milk Hill		70 25 30 SW		
Steeple Ashton	Seend Steeple	44 9 30 NE	106641 E	241262 N
Milk Hill		78 35 10 SW		

Names of Stations and intersected Objects.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
		"	Feet.	Feet.
Steeple Ashton	Hinton Steeple, Somerset	85 9 50 NW	51932 E	232449 N
Clay Hill	-	25 14 50 NW		
Bradley Knoll	White Horse New Station	38 42 0 NE	92271 E	210468 N
Beacon Hill	-	73 55 0 NW		
White Horse	Trowbridge Spire	33 42 0 NW	78090 E	231726 N
Bradley Knoll	-	18 34 0 NE		
White Horse	Farley Clump	36 1 0 NW	58846 E	256439 N
Bradley Knoll	-	2 3 0 NE		
Farley Clump	Melksham Steeple	80 12 0 SE	93232 E	250499 N
White Horse	-	1 23 0 NE		

*Meridian of Butterson Hill.*

Butterson Hill	Rippon Tor New Station	26 51 33 SE	28516 E	56308 N
Rippon Tor Old Station	-	17 25 37 NW		
Rippon Tor New Station	Horner Down	5 56 3 SE	35873 E	14467 S
Butterson Hill	-	68 2 13 SE		
Horner Down	Denbury	18 30 37 NE	52015 E	33753 N
Rippon Tor	-	46 10 18 SE		
Horner Down	Church Stow	31 3 47 SW	19746 E	41255 S
Butterson Hill	-	25 34 23 SE		
Horner Down	Morleigh Camp	30 25 38 SE	40145 E	21745 S
Butterson Hill	-	61 33 38 SE		
Rippon Tor	Totness Steeple	21 40 18 SE	47998 E	7280 N
Denbury	-	8 37 42 SW		
Totness Steeple	Marldon Beacon	73 18 2 NE	66332 E	12780 N
Denbury	-	34 19 18 SE		
Totness Steeple	Willman Hill	79 48 58 SE	64899 E	4244 N
Marldon Beacon	-	9 31 32 SW		
Horner Down	Higher East Close	81 5 53 SE	61180 E	18433 S
Rippon Tor	-	23 36 23 SE		
Horner Down	Bigbury Spire	51 10 57 SW	5080 E	39242 S
Butterson Hill	-	7 22 43 SE		
Horner Down	Marlborough Spire	20 27 18 SW	18404 E	61298 S
Butterson Hill	-	16 42 32 SE		
Marlborough Spire	Portlemouth	72 25 26 SE	32292 E	65685 S
Church Stow	-	27 11 26 SE		
Butterson Hill	-	26 11 8 SE		
Butterson Hill	Kingston Steeple	9 5 7 SW	5713 E	35723 S
Bigbury	-	71 57 3 NW		
Portlemouth	Charleton Steeple	0 13 34 NE	32347 E	51712 S
Church Stow	-	50 19 16 SE		
Church Stow	Buckland Tout Saints	86 22 44 SE	34418 E	40326 S
Portlemouth	-	4 46 54 NE		

Names of Stations and intersected Objects.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
Portlemouth -	Marlborough Station	67 26 26 NW	Feet.	Feet.
Church Stow -	Marlborough Station	15 55 24 SW	14844 E	58435 S
Portlemouth -	West Allington Steeple	39 28 4 SE		
Portlemouth -	West Allington Steeple	25 46 16 NW	23639 E	47752 S
Church Stow -	South Pool Station	63 21 44 NE		
South Pool Station -	South Pool Station	50 37 36 SE	42984 W	60325 S
Portlemouth -	Chivelstone Station	6 36 36 SE		
Chivelstone Station -	Chivelstone Station	78 16 24 NE	43339 E	63392 S
Portlemouth -	Salcombe Chapel	89 43 26 SW		
Morleigh Camp -	Salcombe Chapel	49 34 36 NW	29525 E	63325 S
Higher East Close -	Wallaton Cross	20 32 0 SE		
Wallaton Cross -	Wallaton Cross	51 2 40 SW	44095 E	32290 S
Morleigh Camp -	Black Abton	34 0 50 NE		
Butterton Hill -	Black Abton	76 32 50 SE	49674 E	24024 S
Hemerdon Ball -	Holland Hill	26 24 8 SW		
Holland Hill -	Holland Hill	54 3 52 SE	8104 W	16330 S
Butterton Hill -	Modbury Spire	51 35 52 SE		
Holland Hill -	Modbury Spire	1 52 6 SE	762 E	23353 S
Butterton Hill -	Ugborough Spire	66 5 8 NE		
Brent Tor -	Ugborough Spire	38 25 16 SE	7471 E	9419 S
Black Down -	Cock's Tor	56 20 25 SE		
Brent Tor -	Cock's Tor	30 22 25 SE	42396 W	56524 N
Cock's Tor -	Kit Hill New Station	45 8 35 SW		
Cock's Tor -	Kit Hill New Station	71 12 35 SW	93041 W	39295 N
Kit Hill -	St. Budeaux Steeple	22 44 35 SW		
St. Stephens Down -	St. Budeaux Steeple	34 56 15 SE	65899 W	444 N
Black Down -	Bradbury Castle	58 22 54 NE		
Cawsand Beacon -	Bradbury Castle	9 12 30 NW	59524 W	120224 N
St Stephens Down -	Warbstow Barrow	76 38 4 NW		
Bradbury Castle -	Warbstow Barrow	71 19 8 NW		
St. Stephens Down -	Warbstow Barrow	78 22 5 SW	152334 W	101118 N
Bradbury Castle -	Bratton Clovelly	67 16 44 NE		
St. Stephens Down -	Bratton Clovelly	25 20 15 SW	65678 W	107224 N
Bradbury Castle -	Ashwater	35 15 58 NE		
St. Stephens Down -	Ashwater	85 30 46 SW	91168 W	117735 N
Warbstow Barrow -	North Tamerton Steeple	5 24 35 NW		
Warbstow Barrow -	North Tamerton Steeple	57 53 7 NE	115899 W	123988 N
St. Stephens Down -	Beacon Moor, Holsworth	53 53 54 NE		
Warbstow Barrow -	Beacon Moor, Holsworth	19 44 34 NE	91760 W	145295 N
St. Stephens Down -	Kilhampton	12 59 38 NE		
Warbstow Barrow -	Kilhampton	16 25 9 NW	136566 W	169451 N
St. Stephens Down -	Holsworthy Steeple	45 59 18 NE		
St. Stephens Down -	Holsworthy Steeple	6 18 5 NE	106027 W	145855 N
Warbstow Barrow -	Bridgetule Steeple	14 13 49 NW		
Cawsand Beacon -	Bridgetule Steeple	31 46 11 NW	126468 W	142885 N
Rippin Tor -	Great Hildon	76 59 7 SE		
Great Haldon -	Great Hildon	53 27 48 NE	73280 E	89204 N
Rippin Tor -	Palk's Tower	49 39 32 NW		
	Palk's Tower	48 54 38 NE	69876 E	92095 N

Names of Stations and intersected Objects.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Feet.	Feet.
Bradbury Castle -	Beacon Moor -	{ 44 29 47 NE 11 32 9 SW	7762 E	188702 N
Cawsand Beacon -	Spreyton -	{ 48 22 26 NE 85 54 21 NE	10558 E	125241 N
Cawsand Beacon -		{ 3 7 29 NW 49 0 9 NE	11611 W	161866 N
Bradbury Castle -	Winckley Steeple -	{ 34 19 49 NW 37 3 26 NE	37155 W	149842 N
Cawsand Beacon -	Hatherleigh Station	{ 39 8 37 NE 28 14 47 NW	34460 E	161170 N
Bradbury Castle -	West Morchard Steeple	{ 89 3 19 SW 2 29 35 NE	58245 W	149494 N
Cawsand Beacon -	High Hampton Steeple	{ 69 17 45 NW 8 5 33 NW	121569 W	151730 N
Great Haldon -	Pancras Week Steeple	{ 60 3 26 NE 4 28 37 NE	5290 W	151463 N
Hatherleigh Station -	Budleigh Steeple -	{ 70 13 51 NE 13 33 27 NE	661 W	141386 N
Bradbury Castle -	North Tawton, Steeple	{ 32 16 2 NE 15 17 26 NE	17012 E	148838 N
Cawsand Beacon -	Zeal Monachorum -	{ 38 2 3 NE 38 1 27 NW	24900 E	151071 N
Cawsand Beacon -	Downe St. Mary Steeple	{ 45 54 19 NE 42 43 31 NW	50863 W	164687 N
Great Haldon -	Petrock Stowe -	{ 7 48 48 NE 72 50 53 NW	47773 W	205840 N
High Hampton -	Bellevue -	{ 48 59 8 SW 10 43 39 NW	71787 W	184956 N
Hatherleigh -	Langtree Steeple	{ 34 26 10 NE 41 0 27 NW	29860 W	231965 N
Bradbury Castle -	Cotten Hill -	{ 52 25 54 NE 9 5 58 NE	18690 E	256963 N
Beacon Moor -	Span Head -	{ 26 13 22 NE 48 52 17 SE	34556 E	243109 N
Belevue -	Northmolton Ridge	{ 68 45 13 SE 3 39 47 SE	38814 E	176628 N
Beacon Moor -	Thelbridge Steeple	{ 70 13 55 SE 15 19 5 SE	54014 E	172078 N
Beacon Moor -	Puddington Steeple	{ 0 9 37 NW 27 23 26 NW	7508 E	278549 N
Span Head -	Paracombe Station -	{ 66 48 33 SW 54 35 47 NW	56701 W	251042 N
Beacon Moor -	Heanton Steeple -	{ 58 45 44 SW 73 19 57 SW	73682 W	229306 N
Cotten Hill -	Northam Steeple -	{ 66 34 43 SW 4 16 25 NE	25350 W	292779 N
Paracombe -	Hangman Hill -	{ 75 24 10 SW 23 11 50 NW	56042 W	225144 N
Span Head -	Harwood Steeple -	{ 87 31 10 SW 59 54 10 SW	92701 W	203895 N
Paracombe -	Parkham Steeple -	{ 59 54 10 SW		
Cotten Hill -				
Belevue -				
Belevue -				
Harwood Steeple -				

Names of Stations and intersected Objects.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Feet.	Feet.
Cotten Hill -	Atherington Steeple	9 5 50 SE	26489 W	210910 N
Harwood Steeple -		64 16 50 SE		
Span Head -	Mary Ansleigh Steeple	5 56 20 SE	23715 E	208662 N
Northmolton Ridge -		17 28 20 SW		
Span Head -	Kingsnympton Spire	14 42 20 SW	3651 E	199656 N
Northmolton Ridge -		35 25 20 SW		
Span Head -	Knowstone Steeple -	61 28 40 SE	66889 E	230771 N
Northmolton Ridge -		69 6 50 SE		
Span Head -	Castle, Castle Hill	35 14 40 SW	360 W	230000 N
Northmolton Ridge -		69 25 20 SW		
Span Head -	Chittlehampton Steeple	39 16 10 SW	12020 W	219378 N
Northmolton Ridge -		62 59 10 SW		
Span Head -	Saterleigh Gazebo -	21 40 40 SW	36 W	209845 N
Northmolton Ridge -		46 7 20 SW		
Span Head -	Southmolton Steeple	8 17 50 SW	13484 E	221258 N
Northmolton Ridge -		43 57 40 SW		
Northmolton Ridge -	East Anstey Steeple	57 20 30 SE	63689 E	224436 N
Southmolton Steeple -		80 22 40 NE		
Beacon Moor -	Warkleigh Steeple -	38 57 30 NW	9693 W	210288 N
Northmolton Ridge -		53 26 10 SW		
Beacon Moor -	Witheridge -	83 33 20 SE	43765 E	184635 N
Northmolton Ridge -		8 56 50 SE		
Beacon Moor -	Chawleigh Steeple -	29 26 30 SE	14001 E	177648 N
Thelbridge Steeple -		87 38 40 NW		
Beacon Moor -	Chumleigh Steeple -	18 33 40 SW	5619 E	182325 N
Thelbridge Steeple -		80 15 40 NW		
Beacon Moor -	Coldridge Steeple -	4 36 20 SE	9987 E	161081 N
West Morchard -		89 45 10 NW		

## Meridian of St. Agnes Beacon.

St. Buryan Steeple -	Levan Signal Staff -	44 46 12 SW	108914 W	98140 S
Sennen Steeple -		14 48 48 SE		
St. Buryan Steeple -	Pendennick Signal Staff	83 3 48 NW	116220 W	81768 S
Sennen Steeple -		45 29 48 SW		
Levan Signal Staff -	Titterdieu Signal Staff	75 41 12 NE	84770 W	91980 S
St. Buryan Steeple -		53 42 48 SE		
Pertinney -	Castle Dennis -	55 39 32 NE	71566 W	52960 S
Karnminnis -		12 0 8 SE		
Pertinney -	Tregonning Signal Staff	87 29 32 NE	31705 W	69692 S
Karnminnis -		55 41 38 SE		
Pertinney -	St. Michael's Mount	85 5 32 NE	61262 W	69337 S
Castle Dennis -		32 10 28 SE		
Pertinney -	St. Paul's Steeple	74 40 28 SE	77254 W	79064 S
Ludgvan Steeple -		31 53 32 SW		
Karnminnis -	Knill's Monument -	88 29 22 NE	61931 W	40392 S
Tregonning Signal Staff		45 53 38 NW		

Names of Stations and intersected Objects.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Fect.	Fect.
Karnminnis	Gwinear Steeple	85 47 38 SE	35955 W	43529 S
Tregonning Signal Staff		9 13 38 NW		
Karnminnis	St. Hilary Spire	64 57 8 SE	43504 W	55049 S
Tregonning Signal Staff		38 51 38 NW		
Karbonellis	Park Loughs Signal Staff	6 55 10 SW	10734 W	111239 S
Tregonning Staff		26 46 46 SE		
Karbonellis	St. Erme Steeple	45 38 1 NE	44658 E	983 N
St. Agnes Beacon		88 44 22 SE		
St. Erme Steeple	St. Michael Penkeville	10 53 29 SE	49499 E	24176 S
Karbonellis	Steeple	67 54 31 NE	62206 E	5293 S
St. Erme Steeple	Probus Steeple	70 19 19 SE	67269 E	20644 N
St. Michael Penkeville		33 56 31 NE		
St. Erme Steeple	Trevidown	48 59 41 NE	67269 E	20644 N
Probus Steeple		11 24 1 NE		
Park Loughs Signal Staff	Cury Steeple	14 31 44 NE	6557 W	95119 S
Tregonning Signal Staff		44 40 46 SE		
Cury Steeple	Helston Down	7 47 46 NW	8533 W	80682 S
Tregonning Signal Staff		64 36 46 SE		
Helston Down	Helston Steeple	39 46 46 NW	13930 W	74200 S
Tregonning Signal Staff		75 44 46 SE		
Karnminnis	St. Ann's Summer House	61 20 58 NE	150 E	115 N
St. Agnes Beacon		52 41 3 NE		

Meridian of Dunnose.

Beacon Hill	Salisbury Spire	22 6 34 SW	137645 W	163571 N
Dean Hill		68 52 6 NW		
Beacon Hill	Stockbridge Hill, New	67 17 6 SE	59732 W	181485 N
Dean Hill	Station	55 36 4 NE		
Stockbridge Hill	Farley Monument	19 53 46 SE	52333 W	161043 N
Dean Hill		78 53 17 NE		
Farley Monument	Lyndhurst Steeple	27 22 17 SW	87582 W	92953 N
Dean Hill		16 22 13 SE		
Farley Monument	Town Hill Telegraph	23 8 43 SE	31004 E	11155 N
Dean Hill		61 41 23 SE		
Farley Monument	Heathcote's Pillar	39 28 37 SW	76546 W	131753 N
Dean Hill		55 54 23 SE		
Heathcotes Pillar	Toot Hill Telegraph	72 55 23 NE	59741 W	126620 N
Dean Hill		61 40 23 SE		
Heathcotes Pillar	White Flood Clump	80 40 37 NE	11554 W	143106 N
Farley Monument		66 15 23 SE		
Heathcotes Pillar	Ayres Summer House	67 4 43 NW	114910 W	148020 N
Dean Hill		75 1 34 SW		
Farley Monument	Nettle Heath Clump	22 42 53 SE	28654 W	104486 E
Dean Hill		58 37 23 SE		
Heathcote's Pillar	Eling Steeple	25 13 3 SE	64632 W	106647 N
Dean Hill		42 8 23 SE		



Names of Stations and intersected Objects.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Fect.	Fect.
Heathcote's Pillar -	Ramsey Steeple -	59 31 57 NE	69724 W	135736 N
Eling Steeple -		9 55 53 SW		
Heathcote's Pillar -	Caddenham Station -	45 59 37 NE	63156 W	144600 N
Dean Hill -		81 30 23 SE		
Ayres Summer House	Branshaw Telegraph	10 8 23 SE	110125 W	121253 N
Heathcote's Pillar -		72 40 37 SW		
Farley Monument -	Ann's Hill Beacon -	79 18 23 SE	25848 W	156043 N
White Flood Clump -		47 51 23 NW		
Ann's Hill Beacon -	Longwood Barrow -	82 32 37 NE	13444 W	157668 N
White Flood Clump		7 24 23 NW		
Ann's Hill Beacon -	Winchester Cathedral	4 21 23 NW	26260 W	161449 N
Longwood Barrow -		73 33 23 NW		
Farley Monument -	Wickham Lodge Teleg	47 49 23 SE	9996 E	104573 N
Nettle Heath Clump		89 52 7 NE		
Farley Monument -	Winchester Hill -	69 40 53 SE	25340 E	132282 W
Wickham Lodge Teleg.		28 58 37 NE		
Winchester Hill -	Chalkdon Telegraph	58 26 23 SE	50008 E	117129 N
Wickham Lodge Teleg.		72 34 37 NE		
Wickham Lodge Teleg.	Portsdown Telegraph	9 21 53 SE	33033 E	85649 N
Farley Monument -		50 35 53 SE		
White Flood Clump	Gander Down Summer House -	82 36 18 SE	6744 W	155127 N
Farley Monument -		21 47 27 NE		
Gander Down Sum. Ho.	Alresford Steeple -	79 34 2 NE	8620 E	172270 N
Chalkdon Telegraph		41 51 22 NE		
Wickham Lodge Teleg.	Stanstead Monument -	41 48 23 SE	69493 E	95342 N
Chalkdon Telegraph		81 10 53 SE		
Stanstead Monument	Beacon Hill Telegraph	76 10 37 NE	79947 E	124496 N
Chalkdon Telegraph		19 43 37 NE		
Beacon Hill Telegraph	Hemsworth Chapel	16 59 23 SE	60392 E	83149 N
Winchester Hill -		25 18 37 SW		
Beacon Hill Telegraph	Froxfield Mill -	48 0 37 NE	52783 E	156383 N
Froxfield Mill -		39 53 53 NW		
Beacon Hill Telegraph	Binstead Spire -	21 14 7 NE	68992 E	198693 N
Banstead Spire -		8 23 53 NW		
Beacon Hill Telegraph	East Worldham Steeple	37 10 7 SW	2037 E	189523 N
East Worldham Steeple		15 23 53 NW		
Beacon Hill Telegraph	Bramshot Spire -	59 52 53 SE	92136 E	172068 N
East Worldham Steeple		14 22 7 NE		
Banstead Spire -	Alton Spire -	65 38 53 NW	51116 E	194464 N
Beacon Hill -		76 41 7 SW		
Highclere Beacon -	Andover Steeple -	80 28 2 NE	64069 W	276162 N
Beacon Hill -		39 36 42 SW		
Highclere Beacon	Danesbury Camp -	67 42 58 SE	78224 W	189596 N
Beacon Hill -		35 11 2 SW		
Highclere Beacon	Windmill Hill, Dummer	86 8 22 NE	13891 E	215800 N
Bacon Hill -		51 18 38 SE		
Highclere Beacon	Popham Beacon -	88 32 2 NE	11374 W	209540 N
Popham Beacon -		26 22 58 SE		
Highclere Beacon	Hannington Steeple	6 52 2 NE	6844 W	247122 N
		76 23 8 SE		

Names of Stations and intersected Objects.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Feet.	Feet.
Popham Beacon	Crawley Clump	47 47 2 SW	39015 W	184458 N
Highclere Beacon		4 50 2 SW		
Danesbury Camp	Lord Portsmouth's	49 8 2 NE	39201 W	223359 N
Highclere Beacon	House	11 18 32 SW		
Dean Hill	Walbury Camp	20 56 31 NE	59572 W	268360 N
Highclere Beacon		60 36 59 NW		
Walbury Camp	Newbury Steeple	60 35 1 NE	28799 W	285712 N
Highclere Beacon		7 44 1 NE		
Walbury Camp	Uphursthorpe Mill	5 58 1 SW	62549 W	239880 N
Highclere Beacon		65 8 1 SW		
Walbury Camp	Lord Carnarvon's	77 34 59 SE	33954 W	262719 N
Highclere Beacon	Temple	4 49 59 NW		
Danesbury Camp	Windmill Hill, Lugger-	29 25 58 NW	102988 W	233483 N
Beacon Hill	shall	32 38 2 NE		
Beacon Hill		36 48 2 NE	85598 W	252876 N
Highclere Beacon	Tidcombe Down	89 19 22 SW		
Windmill Hill		60 29 2 NE	85540 W	243361 N
Danesbury Camp	Chute Steeple	7 44 58 NW		
Windmill Hill		46 40 58 NW	148963 W	276835 N
Beacon Hill	Milk Hill	22 22 58 NW		
Windmill Hill		76 6 58 NW	162342 W	248150 N
Beacon Hill	Red Horn Clump	45 34 58 NW		
Windmill Hill		6 20 58 NW	108057 W	279031 N
Red Horn Clump	Lord Elbury's Monu-	60 22 2 NE		
	ment			

Meridian of Greenwich.

Wendover	Stanmore	63 15 17 SE	78374 W	52629 N
Kensworth		25 33 36 SE		
Pen Steeple	Windsor Castle	16 43 5 SE	137374 W	2846 N
Stanmore		49 0 35 SW		
Kensworth	Berkhampstead Gazebo	66 49 36 SE	28002 W	101794 N
Stanmore		45 41 54 NE		
Harrow Spire	Hillingdon Steeple	63 5 32 SW	104291 W	21213 N
Beaconsfield Steeple		58 49 28 SE		
Windsor Castle	Beaconsfield	9 25 5 NW	144445 W	45484 N
Pen Steeple		39 32 5 SE		
Beaconsfield	Cookham Dean	55 17 55 SW	169700 W	27996 N
Windsor Castle		52 7 5 NW		
Windsor Castle	Gray Steeple	67 7 5 NW	159523 W	12194 N
Cookham Dean		32 17 5 SE		
Gray Steeple	Farnham Steeple	64 56 55 NE	139611 W	21500 N
Cookham Dean		77 49 5 SE		
Gray Steeple	Cookham Steeple	2 57 5 NW	160497 W	31114 N
Cookham Dean		71 16 55 NE		
Gray Steeple	Mount Pleasant Gazebo	9 2 55 NR	157528 W	34766 N
Cookham Dean		60 54 55 NE		

Names of Stations and intersected Objects.		Bearing	Distance from Meridian.	Distance from Perpendicular.
			Feet.	Feet.
Mount Pleasant -	Shottesbrook Spire	35 44 55 SW	179471 W	4265 N
Bray Steeple -		68 21 55 SW		
St. Peter's, St. Alban's	Watford Spire -	20 55 40 SW	89572 W	64776 N
Stanmore -		42 40 36 NW		
Cookham Dean -	Nettlebed Windmill	78 22 5 NW	224162 W*	39208 N
Windsor Castle -		67 16 5 NW		
Nettlebed Windmill -	Ruscombe Steeple	39 28 45 SE	193554 W	2049 N
Windsor Castle -		89 11 1 SW		
Nettlebed Windmill -	Fawley Steeple -	82 55 45 SE	207380 W	37127 N
Ruscombe Steeple -		21 30 45 NW		
Nettlebed Windmill -	Shiplake Steeple -	34 10 15 SE	203574 W	8878 N
Ruscombe Steeple -		55 43 15 NW		
Shiplake Steeple -	Henley Steeple -	4 29 15 NW	204 35 W	43676 N
Ruscombe Steeple -		27 20 15 NW		
Quainton -	Brill Spire -	53 4 58 SW	237640 W	126390 N
Kensworth -		82 33 28 SW		
Quainton -	Aylesbury Steeple -	40 23 34 SE	184119 W	125001 N
Kensworth -		75 19 5 SW		
Wendover -	Long Crindon Windmill	77 22 18 NW	22608 W	112614 N
Kensworth -		74 36 42 SW		
Bow Brickhill -	Wing Steeple -	16 51 38 SW	162518 W	153853 N
Lilleyhoe -		77 23 39 SW		
Bow Brickhill -	Wingrave Steeple -	17 23 35 SW	166752 W	141526 N
Lilleyhoe -		70 7 27 SW		
Long Crindon Windmill	Whitchurch Steeple	46 58 31 NE	188146 W	148205 N
Aylesbury Steeple -		9 55 29 NW		
Long Crindon Windmill	Lousley Row Windmill	53 16 29 SE	184802 W	81818 N
Aylesbury Steeple -		0 54 31 SW		
Long Crindon Windmill	Hadwell Barrow -	4 54 21 SE	223051 W	77280 N
Aylesbury Steeple -		39 12 31 SW		
Hadwell Barrow -	Tame Steeple -	2 17 39 NE	222094 W	101182 N
Long Crindon Windmill		19 14 21 SE		
Quainton -	Cobham's Pillar -	21 50 50 NW	227343 W	204635 N
Bow Brickhill -		79 27 3 NW		
Quainton -	Winslow Steeple -	18 12 20 NE	198641 W	170881 N
Cobham's Pillar -		40 22 25 SE		
Winslow Steeple -	Buckingham Spire -	49 24 25 NW	222564 W	191383 N
Cobham's Pillar -		19 49 25 SE		
Winslow Steeple -	Harwood Mill -	13 21 35 NE	195026 W	186108 N
Buckingham Spire -		79 9 25 SE		
Berkhamstead Gazebo	St. Peter's, St. Albans	89 40 44 SW*	75525 W	101527 N
Stanmore -		3 20 4 NE		
Watford Spire -	Rickmansworth Steeple	68 45 54 SW	106020 W	58364 N
Stanmore -		78 14 36 NW		
Orwell -	Hardwick Spire -	14 22 22 NE	2401 W	269291 N
Babham Station -		73 7 8 NW		
Orwell -	Orwell Pole -	52 43 22 SE	66 E	245224 N
Royston -		16 16 38 NE		
Orwell Pole -	Royston Steeple -	6 44 38 SW	4308 W	208233 N
Royston -		65 35 38 NE		

Names of Stations and intersected Objects.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Feet.	Feet.
Orwell Pole	Croydon Steeple	71 7 38 SW	17828 W	239107 N
Royston		10 7 22 NW		
Newmarket	Streatham Spire	53 15 20 SW	51548 E	322680 N
Ely Minster		28 28 20 SW		
Newmarket	Gog Magog Telegraph	60 4 40 SW	43403 E	251493 N
Ely Minster		11 34 40 SW		
Newmarket	Swaffham Steeple	89 17 20 SW	69839 E	285539 N
Streatham Spire		26 12 20 SE		
Streatham Spire	Chatteris Steeple	44 2 40 NW	12576 E	362969 N
Ely Minster		66 43 40 NW		
Streatham Spire	Sutton Steeple	53 54 40 NW	30269 E	338192 N
Ely Minster		83 34 20 SW		
Streatham Spire	St. Ive's Steeple	83 4 20 SW	17794 W	314256 N
Cottenham Steeple		76 57 40 NW		
Chatteris Steeple	March Spire	14 18 20 NE	20490 E	394005 N
Ely Minster		38 23 40 NW		
Sutton Steeple	Somersham Steeple	84 32 10 NW	9 W	335296 N
Chatteris Steeple		24 27 10 SW		
Sutton Steeple	Warboys Spire	84 52 40 SW	19353 W	342640 N
Chatteris Steeple		57 31 50 SW		
Sutton Steeple	Littleport Steeple	57 33 20 NE	71278 E	364263 N
Ely Minster		22 38 20 NE		
Warboys Spire	Ramsey Steeple	11 12 10 NE	22944 W	360768 N
Chatteris Steeple		86 28 50 SW		
Ely Minster	Wisbich Steeple	13 18 40 NW	38032 E	442604 N
Chatteris Steeple		17 43 50 NE		
Ely Minster	Thorney Abbey	45 35 40 NW	24052 W	425935 N
Wisbich Steeple		74 58 20 SW		
Ely Minster	Crowland Abbey	43 15 40 NW	37335 W	447195 N
Wisbich Steeple		86 30 40 NW		
Ely Minster	Lynn Old Tower	12 56 20 NE	92769 E	476160 N
Wisbich Steeple		58 29 20 NE		
Ely Minster	Peterborough Cathedral	60 28 40 NW	54838 W	407859 N
Wisbich Steeple		69 29 20 SW		
Ely Minster	Downham Steeple	19 1 20 NE	88774 E	419730 N
March Spire		59 21 20 NE		
Peterborough	Whittlesea Spire	75 48 30 SE	28870 W	401292 N
Wisbich Steeple		58 18 20 SW		
St. Ives Spire	King's Bush	58 34 20 SW	33199 W	303620 N
Cottenham Steeple		89 18 40 NW		
King's Bush	Huntingdon Steeple	27 52 40 NW	41319 W	315189 N
St. Ives Steeple		87 43 40 NW		
King's Bush	Yelling Spire	0 49 40 SE	34907 W	283608 N
Cottenham Steeple		53 20 SW		
Lilleyhoe	Biggleswade Spire	28 19 NE	59875 W	222454 N
Royston		56 38 NW		
Biggleswade Spire	Clay Hill Bush	52 8 40 SE	33765 W	202160 N
Royston		82 59 20 SW		
Clay Hill Bush	Henlow Steeple	87 41 40 NW	63668 W	203364 N
Biggleswade Spire		11 14 20 SW		

Names of Stations and intersected Objects.		Bearings.	Distance from Meridian.	Distance from Perpendicular.
			Feet.	Feet.
Henlow Steeple -	Baldock Telegraph -	48 15 40 SE	39906 W	182164 N
Clay Hill Bush -		17 4 20 SW		
Biggleswade Spire -	North Hill Steeple -	61 56 40 NW	72537 W	229203 N
Henlow Steeple -		18 56 40 NW		
Biggleswade Spire -	Blunham Steeple -	26 39 40 NW	70752 W	244119 N
North Hill Steeple -		6 49 20 NE		
St. Ann's Hill -	Banstead Spire -	69 15 10 SE	45582 W	56816 S
Hanger Hill Tower -		16 46 0 SE		
St. Ann's Hill -	St. Ann's Clump -	74 32 50 SW	119860 W	28979 S
Banstead Spire -		69 27 20 NW		
St. Ann's Clump -	Pain's Hill Spire -	35 25 20 SE	101174 W	55253 S
Banstead Spire -		88 23 20 NW		
St. Ann's Clump -	Woking Monument -	3 57 40 SW	122110 W	61475 S
Pain's Hill Spire -		73 27 0 SW		
St. Ann's Clump -	Guildford Steeple -	9 53 40 SW	130248 W	88530 S
Pain's Hill Spire -		41 8 40 SW		

ART. V. *An Alphabetical List of the Latitudes and Longitudes of the principal Stations, together with several Church Steeples, Lighthouses, and other remarkable Objects.*

Names of Stations and Objects.	Latitude.	Longitude from Greenwich.	Names of Stations and Objects.	Latitude.	Longitude from Greenwich.
Abergele Steeple -	53 17 10	3 34 13 W	Anstruther, East, Spire	56 13 40	2 41 24 W
Abbotsbury Signal Staff	50 40 30	2 36 54 W	ARRAN FOWNDY	52 47 15	3 40 27 W
ABERYSTWTH			ARRENNIO	52 55 3	3 43 55 W
STATION -	52 25 49	4 3 19 W	Asaph, St. Cathedral	53 15 28	3 25 44 W
Air Point, Lighthouse	53 21 28	3 18 35 W	ASHLEY HEATH -	52 55 10	2 22 13 W
Alban's, St. (St. Peter's Steeple) -	50 45 19	0 19 31 W	ishurst Beacon -	53 33 59	2 44 40 W
ALNWICK MOOR -	55 25 12	1 45 35 W	Ashwater -	50 44 5	4 16 20 W
Alresford Steeple -	51 5 27	1 9 21 W	Ashwell Spire -	52 2 37	0 9 23 W
Alton Spire -	51 9 5	0 58 17 W	Aspley Steeple -	52 0 59	0 37 29 W
Amalwch Steeple -	53 23 0	4 19 17 W	Atherington Steeple. -	50 59 26	3 59 40 W
Andover Steeple -	51 12 39	1 28 19 W	Aughton Spire -	53 32 31	2 54 31 W
Annan Spire -	54 59 23	3 14 45 W	AXEDGE -	53 14 0	1 56 27 W
ANN's, ST. HILL, Pem.	51 41 39	5 8 53 W	Axholme Steeple -	53 29 27	0 50 40 W
Ann's St. Summer House	50 18 28	5 11 53 W	Aylesbury Steeple -	51 49 3	0 48 41 W
Ann's St. Lighthouse	51 40 59	5 9 19 W	Ayre's Summer House	51 1 24	1 41 27 W
Anstey, East Steeple	51 1 38	3 36 15 W	BAGBOROUGH -	51 6 36	3 10 54 W
Anstey, West Steeple	51 2 51	3 36 44 W	Baldock Telegraph -	51 58 36	0 10 35 W
Anstruther, West, Spire	56 13 33	2 41 37 W	BALSHAM NEW STA- TION -	52 9 27	0 18 56 E

Names of Stations and Objects.	Latitude.	Longitude from Greenwich.	Names of Stations and Objects.	Latitude.	Longitude from Greenwich
Balsham Steeple	52° 8' 13"	0° 20' 3" E	Blackadder Tower	55° 46' 35"	13° 27' W
Bambrough Castle Flag staff	55° 36' 42"	1° 42' 8" W	BLACKHEDDON	55° 38' 30"	55° 15' W
Banstead Spire	51° 19' 19"	0° 11' 55" W	Blackrod Steeple	53° 35' 44"	34° 33' W
BAR BEACON	52° 34' 23"	1° 54' 12" W	BLAGDON	51° 18' 45"	43° 48' W
BARDON HILL	52° 42' 56"	1° 18' 52" W	Blandford Telegraph	50° 53' 1"	6° 8' W
Barkston Spire	52° 54' 26"	0° 50' 24" W	BLEASDALE FOREST	53° 55' 2"	3° 22' W
BARNABY MOOR	54° 33' 31"	1° 6' 58" W	Bluhnam Steeple	52° 8' 46"	18° 50' W
Bas Rock, highest point	56° 4' 53"	2° 37' 47" W	Boldon, West, Spire	54° 56' 44"	26° 46' W
Base on Misterton Carr			Boothby Steeple	53° 7' 7"	31° 24' W
NORTH END OF	53° 31' 50"	0° 54' 3" W	BOTTESFORD	52° 56' 57"	47° 19' W
SOUTH END OF	53° 27' 34"	0° 55' 11" W	Bottesford Spire	52° 56' 40"	47° 45' W
Base on Rhuddlan Marsh			Bottisham Steeple	52° 13' 42"	0° 16' 29' E
EAST END OF	53° 17' 14"	3° 27' 33" W	BOTTON HEAD	54° 24' 28"	1° 4' 87' W
WEST END OF	53° 17' 44"	3° 34' 12" W	BOULSWORTH HILL	53° 49' 5"	2° 5' 58' W
Bassingbourn Steeple	52° 4' 49"	0° 3' 31" W	Bow Fell	54° 26' 59"	9° 15' W
Beacon Hill Telegraph	0° 57' 34"	0° 50' 51" W	Bradbury Castle	50° 44' 31"	8° 10' W
Beacons of Brecknock	51° 53' 4"	3° 25' 26" W	BRADFELD POINT	53° 26' 35"	35° 38' W
Beaconsfield Spire	51° 36' 3"	0° 38' 0" W	Bradninch Steeple	50° 49' 44"	24° 35' W
Beadnell Spire	55° 33' 33"	1° 37' 44" W	Bramshot Spire	51° 5' 23"	0° 47' 37' W
Bebbington Spire	53° 20' 55"	2° 59' 32" W	BRANDON WARREN	52° 25' 16"	0° 38' 55' E
Beckford Steeple	52° 1' 17"	2° 1' 41" W	BRANDON DOWN	54° 45'	40° 13' W
Beer Signal Staff	50° 41' 19"	3° 5' 42" W	Branshaw Telegraph	50° 56'	40° 10' W
Bees, St. Head, Light-house	54° 30' 55"	3° 37' 24" W	Branston Spire	52° 17'	12° 31' W
Bellchalwell Telegraph	50° 52' 32"	2° 16' 36" W	Bratton Clovelly	0° 43'	9° 41' W
BELLE FIELD HILL	53° 21' 16"	2° 34' 16" W	Bray Steeple	51° 30'	41° 53' W
Bellevue	0° 58' 37"	4° 5' 12" W	Brayton Spire	53° 46'	4° 44' W
Belton Steeple	53° 32' 56"	0° 48' 56" W	Brachva Mountain	51° 56'	8° 40' W
Belton Spire	46° 2' 19"	1° 19' 38" W	Breedon on the Hill		
Bennington Steeple	53° 33' 15"	2° 11' W	Steeple	52° 48' 25"	1° 2' 7' W
Berrow Steeple	51° 16' 3"	3° 0' W	Breedon Spire	52° 1' 52"	2° 6' 34' W
BERULE (NORTH)	54° 18' 51"	4° 22' 43" W	Brenin Vawr	51° 59' 1"	4° 36' 0' W
Berwick upon Tweed			BRENT KNOLL	51° 15' 16"	2° 56' 6' W
Spire	55° 46' 21"	1° 59' 41" W	Bridgend Steeple	51° 30' 30"	3° 34' 9' W
BERYL HILL	53° 50' 26"	3° 1' 49" W	Bridgerule Steeple	50° 48' 10"	4° 25' 30' W
Bettws Eionon Church	52° 6' 6"	4° 27' 48" W	Brill Spire	51° 49' 10"	46' W
Bidston Lighthouse	53° 24' 6"	3° 3' 46" W	BROGBOROUGH	52° 2' 12"	35° 33' W
Rigbury Spire	50° 18' 19"	3° 51' 29" W	BROMPTON RALPH	51° 5' 48"	18° 56' W
Biggleswade Spire	52° 5' 12"	0° 15' 55" W	Brompton Regis Steeple	51° 4' 26"	29° 7' W
BILLINGE BEACON	53° 30' 39"	2° 42' 22" W	BROWN CLEE HILL	52° 28' 37"	2° 35' 22' W
Bingham Spire	52° 57' 12"	0° 56' 38" W	Brusselton Folly	54° 37' 17"	1° 40' 40' W
Binstead Spire	51° 9' 46"	0° 53' 37" W	Buckingham Spire	51° 59' 53"	0° 59' 5' W
Bispham Steeple	53° 51' 29"	3° 1' 32" W	Buckland Tout Saints	0° 13' 8"	3° 43' 59" W
Bishop and Clerks,			Buckland Steeple	1° 15' 38"	2° 20' 37' W
Northmost Island	51° 54' 10"	5° 21' 58" W	Buckland Steeple	0° 58' 42"	3° 10' 2' W
Bishop Wilton Spire	53° 59' 16"	47' 6" W	Budeaux, St. Steeple	0° 24' 49"	4° 9' 42" W
Bishop's Lydiard	51° 3' 43"	3° 10' 37" W	Budleigh Steeple	0° 49' 40"	3° 54' 10" W
Black Auton	58° 20' 42"	3° 40' 4" W	Burnham Steeple	14° 25'	2° 59' 13" W
BLACK COMB	54° 15' 33"	3° 16' 8" W	BURROW HILL	15° 15'	1° 8' 7" W
BLACK HAMBLETON			Burrow Mount Chapel	4° 16'	2° 54' 20" W
DOWN	54° 18' 29"	1° 14' 35" W	Bwlch Mawr	0° 19'	4° 19' 46" W
			CADER IDRIS	52° 42'	4° 28' 3" W

Names of Stations and Objects.	Latitude.	Longitude from Greenwich.	Names of Stations and Objects.	Latitude.	Longitude from Greenwich.
Caldy Island, Woolhouse	51 37 56	4 39 58 W	COLLIER LAW -	54 46 2	1 58 2 W
CALF (THE) -	54 22 11	30 13 W	Columpton Steeple -	50 51 24	3 22 43 W
Cambridge, Trinity Spire	52 12 45	7 42 E	Combe Florey Steeple	51 4 19	3 12 13 W
Trinity College Chapel	52 12 49	7 27 E	Combe Rawleigh -	50 49 22	3 12 13 W
Great St. Mary's Steeple	52 12 43	7 34 E	Coniston Fell -	54 22 20	3 6 34 W
Cannington -	51 9 32	4 4 W	Cookham Steeple -	51 33 3	0 42 12 W
CAPEL KYNON -	52 7 10	4 21 38 W	Coquet Island, Light-house	55 20 11	3 11 47 W
CAPELLANTE -	51 51 47	3 29 3 W	Cothelestone Lodge	51 5 18	2 47 W
Cardigan Island, high est Point -	52 7 53	4 40 27 W	Coton Spire -	52 13 1	3 59 E
Cardigan Steeple -	52 4 59	4 38 18 W	COTTEN HILL -	51 54	0 35 W
Carlaweroc Castle -	54 58 41	3 30 41 W	Cottenham Spire -	52 18 25	8 27 E
Carmarthen, House at West end -	51 10	4 18 48 W	CRADLE MOUNTAIN	51 57 7	3 6 39 W
Carn Vawr -	37 24	3.30 6 W	Crail Spire -	5 58	2 36 55 W
Carnarvon's, Lord, Temple -	51 20 19	1 20 29 W	Crail, High Building near -	16 59	2 35 49 W
Carreg Gwydd -	51 50 44	3 48 52 W	Cranborne Steeple -	55 9	1 55 0 W
Carrock Fell -	54 41 1	3 0 40 W	Crewkerne Steeple -	53 7	2 47 17 W
Castle Baith Steeple -	51 55 28	51 38 W	CRIF-FELL -	56 44	3 36 55 W
Castle Dennis -	50 9 7	30 11 W	CRIFWELL BISHOP	54 17	1 0 9 W
Castle Ring -	52 42	55 46 W	Crosby Steeple -	29 33	3 0 55 W
Castlin-roach -	50 57 47	1 40 W	CROSS FELL -	42 18	2 28 37 W
Cave Hill, Signal Staff	53 16 57	36 47 W	Crowland Abbey -	42	0 10 4 W
Caythorpe Spire -	53 1 38	0 35 51 W	CROWLE BEACON -	36 36	0 49 4 W
CEFN BRYN -	51 34 50	4 56 19 W	Crowle Steeple -	36 30	0 49 49 W
Chalbury Telegraph	50 51 45	1 58 8 W	Croydon Steeple -	7 57	0 4 45 W
Chalkdon Telegraph	50 56 23	0 58 38 W	Crunwell Steeple -	44 25	36 W
Charleton Steeple -	50 1 16	3 44 31 W	Culmstock -	50 55 45	15 20 W
Chatteris Steeple -	52 28 19	3 22 E	Curry Mallet Steeple	50 59	56 23 W
Chawleigh Steeple -	50 53 58	3 49 10 W	Curry Steeple -	50 2 49	13 36 W
Cheltenham Steeple -	51 54 7	4 6 W	Cutcombe Steeple -	51 8 35	3 31 9 W
Chester, Trinity Spire	53 26	2 53 W	CYRNY BRAIN MOUN		
Chester-le-Street Spire	54 28	1 33 49 W	TAIN -	53 2 20	9 44 W
CHEVIOT (THE) -	5	2 8 12 W	Daffenside Beacon -	54 49 27	30 47 W
Chishall Steeple -	52 46	0 4 40 E	Daniel's St. Spire -	51 40	54 1 W
Chittlehampton Steeple	51 0 49	3 55 55 W	Daventry Spire -	52 15 39	9 3 W
Christeross -	50 50 18	3 27 39 W	David's, St., Cathedral	51 52 56	14 53 W
Chumleigh Steeple -	50 54 44	3 51 70 W	Decuman's, St., Steeple	51 10 36	19 36 W
Church Down Steeple	51 52 13	2 9 49 W	Denbury -	50 30 18	19 0 W
Church Stowe Steeple	50 17 59	2 27 19 W	DENT HILL -	54 30 19	28 28 W
Chute Steeple -	51 17 16	1 33 57 W	Derby Steeple	52 55 32	28 16 W
CLEEVE -	51 55 11	1 59 47 W	Devize's, St. John's Steeple -	51 21 15	1 59 6 W
Cleeve Steeple -	51 56 54	0 W	Doddington Spire	53 0 40	0 43 50 W
Cobham's Pillar -	52 2 3	24 W	Downe, St. Mary, Steeple	50 49 36	3 46 21 W
Coedana Church -	53 18 46	4 20 4 W	Downham Steeple -	52 37 36	0 23 54 E
Cold Ashby Steeple -	52 23 34	1 1 24 W	Drax Spire -	53 43 49	0 58 17 W
Cold Fell Pike -	54 53 45	2 36 21 W	Dulau Signal Staff -	55 55 5	2 13 12 W
Cold Overton Steeple	52 41	0 47 55 W	Dulverton Steeple -	51 2 1	3 32 55 W
Coldridg Steeple	50 51 14	3 50 12 W	Dumpton -	50 49 49	3 9 35 W
Coleby Spire -	53 8 4	0 32 25 W	Dunchurch Steeple -	52 20 16	1 16 56 W

Names of Stations and Objects.	Latitude.	Longitude from Greenwich.	Names of Stations and Objects.	Latitude.	Longitude from Greenwich.
DUNKERY BEACON	51 9 48	3 34	W Granchester Steeple	52 11	0 6 9 E
DUNRIGS (THE) -	55 34 30	3 10	W Grasholm Island	51 43	5 47 1 W
Dunse Spire	55 46 50	2 19	W Great Gavel	54 29	3 12 30 W
Dunstanbrough Castle	55 29 36	1 35	W Gringley on the Hill		
Durham Cathedral	54 46 31	1 34	W Steeple	53 24	0 48 21 W
Earl's Mount Obelisk	55 25 44	1 44	W GRINGLEY BEACON	53 24	0 52 53 W
EASINGTON HEIGHTS	54 33 59	0 50	W Grisdale Pike	54 35	3 14 57 W
Easington Steeple	54 47 9	1 21	W Guildford Steeple	51 14	0 34 0 W
Eastham Spire	53 18 50	2 57	W Guildenborough Spire	52 20	1 0 14 W
East Worldham Steeple	51 8	1 11	W GWAUNYSGAER DOWN	53 19	3 23 1 W
Elbury's, Lord, Monument	51 22 56	1 39 54 W	W Gwynier Steeple	50 11	5 21 6 W
Elden Hills, highest point	55 35	0 42 27 W	W Hbbchester Hill, Signal Staff	55 49	2 4 54 W
Eliauns Point Signal			W Haddenham Spire	52 22 20	0 9 26 E
Staff	53 25	4 16 20 W	W HADDON BEACON	51 2 53	3 28 13 W
Eling Steeple	50 54	1 28 21 W	W Haddon, West Steeple	52 20 30	1 4 16 W
Elmo, St. Summer House	53 19	3 21 46 W	W Haddon Obelisk	50 37 3	3 30 27 W
ELY MINSTER	52 24	0 16 35 E	W Halsall Spire	53 35 11	2 56 24 W
Embleton Steeple	55 29	1 37 42 W	W HAMBLETON DOWN	54 14 51	1 12 39 W
Enmore Steeple	51 6	3 4 34 W	W HANGMAN HILL	51 12 54	3 59 23 W
Epworth Steeple	53 23	0 48 58 W	W Hannington Steeple	51 17 45	1 13 23 W
Everden (Great) Steeple	52 8	0 0 20 E	W Hardwick Spire	52 12 55	0 0 6 W
Everton Flagstaff	53 25	2 57 34 W	W Harrogate Steeple	53 8 59	0 32 37 W
Exeter Cathedral	50 43	3 31 0 W	W Harner Hill	50 48 47	3 3 11 W
Furley Monument	3	1 25 12 W	W HARTLAND POINT	51 1 22	4 30 26 W
Farnham Steeple	32	0 36 41 W	W Hartlepool Steeple	54 41 49	1 10 31 W
Fawley Steeple	34	0 54 32 W	W Harwood Steeple	51 1 45	4 7 21 W
Ferwig Steeple	6	4 38 1 W	W Hatfield Spire	53 47	1 5 27 W
Fivehead Steeple	0 1	2 54 W	W HATHERSAGE	53 21	1 35 8 W
FLATHOLMES LIGHT- HOUSE	51 22 33	3 6 45	W Haverfordwest Spire	51 48 12	4 57 11 W
Fonthill Abbey	51 4 43	2 6 34	W Hawk Church	50 48	1 2 55 22 W
Forniby Point			W HAWKESTONE OBE- LISK	52 51 34	2 36 59 W
North W. Landmark	53 32 34	3 5 2	W Headon Steeple	2 2 22	0 5 39 E
South E. Landmark	53 32 23	3 3 18	W Heanton Steeple	1 6 0	4 7 33 W
Forton Spire	51 56 53	0 40 21	W Heathcote's Pillar	50 58 46	1 31 28 W
Gaddon Hill	0 53 30	3 21 46	W Hedgehope	55 28 28	2 4 54 W
Gander Down Summer House	50 52 38	1 13 21	W Helbre Lighthouse	53 23 34	3 10 13 W
GARREG MOUNTAIN	53 17 41	3 17 19	W HELKINTON	52 23 14	1 3 33 W
GARTH HILL	51 32 35	3 16 55	W Helston Steeple	50 6 15	5 15 29 W
Gensey's Gazebo	50 52 41	3 16 3	W HELVELLIN MOUN- TAIN	54 31 43	3 0 21 W
Gillingham Steeple	51 2 20	2 16 8	W Hembury Fort	50 49 12	3 14 58 W
Glastonbury Tor	51 8 43	2 41 19	W HEMINGBROUGH SPIRE	53 46	0 58 26 W
Gloicester Cathedral	51 52 3	2 14 15 W	W Hemsworth Chapel	50 50	0 55 58 W
Go Hill	53 33 51	2 53 55 W	W Henley Steeple	51 32	0 53 48 W
Gog Magog Telegraph	52 9 59	0 11 34 E	W Henlow Steeple	52 2	0 16 53 W
Goldington Steeple	52 1 16	0 36 58 W	W Henstridge Steeple	50 58	2 23 13 W
Granby Steeple	52 55 8	0 52 47 W	W HESWELL HILL	53 20	3 5 24 W



Names of Stations and Objects.	Latitude.	Longitude from Greenwich.	Names of Stations and Objects.	Latitude.	Longitude from Greenwich.
HIGH PIKE -	54 42 27	3 2 49	Kirkby Lonsdale Steeple	54 12 1	2 35 15 W
HIGHGATE MOUNTAIN -	51 39 41	4 55 12 W	Knill's Monument -	50 11 4	5 27 44 W
High Howland Steeple	53 35 32	1 34 45 W	Knoll Hill -	53 38 5	2 13 53 W
High Hampton Steeple	50 49 19	4 7 52 W	Knowstone Steeple -	51 2 40	3 35 24 W
Hilary, St. Steeple -	51 26 59	3 24 16 W	Kritch Spire -	53 15 4	1 7 10 W
Hilary, St. Steeple, Cornwall -	50 9 23	5 23 2 W	Kyloe Steeple -	55 39 36	1 54 39 W
HILL FARM -	51 57 56	0 37 13 W	Lancaster Steeple -	54 3	2 47 41 W
Hill Farence -	51 1 2	2 36 50 W	Langar Steeple -	52 55	2 51 27 W
Hillingdon Steeple -	51 32 6	0 27 24 W	Langford Budville -	51 0 46	3 12 11 W
Hinton Steeple, Som.	51 19 26	2 18 47 W	Langtree Steeple -	50 55	4 11 24 W
Hinton Steeple, Dorset.	50 56 40	17 46 W	LANNON -	51 45	4 8 9 W
Holcombe Rogus -	50 57 48	19 57 W	Lannon Steeple -	51 45 2	4 6 3 W
HOLLAND HILL -	53 1 56	6 27 W	Lansdown Monument	1 25 29	2 22 22 W
HOLME MOSS -	3 32 23	52 32 W	LARGO LAW -	56 14 15	2 54 52 W
Holsworthy Steeple -	48 41	4 20 13 W	Laugharne Steeple -	1 46 34	4 26 43 W
HOLYHEAD MOUNTAIN -	53 18 51	4 39 27 W	Leadenham Spire -	3 3 20	0 34 47 W
Holy Island Castle Flag-staff -	55 40 20	1 46 38 W	Leasowes Lighthouse	3 24 50	3 6 49 W
Home Steeple -	3 54 38	0 32 15 W	Ledbury Steeple -	52 2 16	2 24 38 W
Honiton Chapel -	50 48 13	3 10 36 W	LEDSTONE BEACON	3 46 31	1 18 47 W
HORSEMOOR HILL -	51 59 42	0 38 2 W	Leigh Steeple -	1 13 28	2 25 58 W
Howden Steeple -	53 44 46	1 12 26 W	Levan Signal Staff -	0 2 16	5 39 39 W
Hubberston Steeple -	51 42 56	5 21 47 W	LINCOLN MINSTER	3 14 7	0 32 1 W
Hume Castle -	55 40 5	2 27 38 W	Litchfield Spire -	2 41 12	1 49 21 W
HUNSLEY BEACON -	53 47 59	0 34 20 W	LITTLEPORT -	52 27 59	0 18 40 E
Huntingdon Steeple	52 20 27	0 11 3 W	Littleport Steeple -	52 28 30	0 19 7 E
Huntspill Steeple -	51 12 19	2 59 8 W	Little Brickhill Steeple	51 58 59	0 40 21 W
Ilchester Steeple	51 0 23	2 40 14 W	Liverpool, St. Paul's	3 24 40	2 58 55 W
Iton Steeple -	50 57 11	2 54 48 W	Llaethly Rock -	1 54 16	5 16 9 W
INGLEBOROUGH HILL	54 10 4	2 23 18 W	Llaleston Steeple -	1 30 23	3 36 29 W
Ives, St. Steeple -	52 20 19	0 4 45 W	Llandilo Steeple -	1 52 55	3 58 37 W
Iwerne Minster	50 55 49	2 10 49 W	LLANDINAM MOUNTAIN -	2 25 15	3 25 26 W
Johnston Steeple -	51 45 17	4 58 41 W	Llandover, St. Mary of the Hill -		3 44 22 W
Kelshall Steeple -	52 0 29	0 3 51 W	LLANELIAN MOUNTAIN, Denb. -	3 15 23	3 43 2 W
Kenfig Steeple -	51 31 26	3 42 26 W	LLANELIAN MOUNTAIN, Ang. -	3 24 41	4 16 55 W
Kentisbeare -	50 52 33	3 16 26 W	Llanelian Spire -	3 24 42	4 17 13 W
Kidwelly Spire -	51 44 15	4 17 22 W	Llanelly Steeple -	1 41	4 8 41 W
Kilhope Law -	54 48 0	2 16 17 W	Llandonna Signal Staff	3 18 43	4 6 31 W
Kilhampton Steeple	50 52 32	4 28 10 W	Llangadock Steeple -	1 56 23	3 52 11 W
Kilrenny Spire -	56 14 17	2 40 35 W	LLANGEINOR MOUNTAIN -	38 28	3 33 33 W
Kilvey Windmill -	51 37 47	3 54 12 W	Llangynog Mountain	49 2	4 23 26 W
Kilvington Steeple -	52 52 28	0 51 46 W	Jansaint Hill -	45 26	4 17 41 W
Kilworth, South Steeple	52 28 44	1 9 23 W	Janstephan Castle -	45 57	4 22 25 W
Kilworth, North Steeple	52 26 39	1 5 23 W	Jantrissant Steeple -	32 32	3 21 50 W
Kingstettes -	51 1 47	2 11 0 W	Janvihangel Penbedw Steeple -	2 1 29	4 35 40 W
Kingsnympton Spire	50 57 35	3 51 51 W	Janwenog Steeple	2 5 16	4 11 0 W
Kingston Steeple -	50 18 54	3 51 40 W			
Kirby Spire -	53 5 55	1 15 48 W			

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	° ' "	° ' "		° ' "	° ' "
LLWYDIART MOUNTAIN -	53 17 10	4 10 26 W	Minehead Steeple -	51 12 42	3 28 4 W
LOMOND TOP, East	56 14 44	3 12 33 W	Missin Steeple -	53 26 49	0 56 19 W
LOMOND TOP, West	56 14 57	3 17 4 W	Misterton Steeple -	52 27 40	1 11 27 W
Long Bennington Steeple -	52 59 12	0 44 27 W	Modbury Spire -	50 20 56	3 52 36 W
LONG MOUNT POLE	52 32 42	2 51 15 W	Moel Fannau -	53 9 19	3 14 37 W
LONG MOUNTAIN -	52 38 44	3 4 35 W	MOELPRE ISSA -	53 14 52	3 33 35 W
LOOSEHOB MOOR -	54 24 11	0 54 54 W	Monance, St. Spire	56 12 24	2 45 37 W
LORD'S SEAT -	53 20 57	1 49 28 W	Montacute's Signal Staff	50 57 2	2 42 44 W
Loughborough Steeple	52 46 31	1 11 54 W	MORDINGTON HILL	55 48 39	2 3 45 W
Loughton Spire -	53 23 21	1 13 7 W	Morebath Steeple -	51 0 57	2 38 1 W
Lowick Steeple -	55 39 12	1 58 28 W	Mote Steeple -	51 53 33	4 47 55 W
Ludchurch Steeple -	51 45 57	4 40 36 W	Mount Pleasant Gazebo	51 34 16	0 41 25 W
Lulworth Flagstaff -	50 39 19	2 18 28 W	Mow COPT -	53 6 56	2 12 15 W
LUMSDANE HILL -	55 54 38	2 11 50 W	Mumbles Lighthouse	51 34 0	3 57 20 W
Lundy Isle, St. Ann's Chapel -	51 9 47	4 38 28 W	MYNYDD WANE -	51 40 27	3 3 36 W
Lutterworth Steeple -	52 27 20	1 12 1 W	NASEBY FIELD -	52 24 21	0 58 28 W
Lyndhurst Steeple -	50 52 23	1 34 19 W	Naseby Steeple -	52 23 52	0 59 3 W
Lynn Old Tower -	52 46 52	0 25 4 E	Nelson's Tower -	51 51 8	4 6 13 W
MADDINGLY -	52 13 21	0 3 46 E	Neston Steeple -	53 17 24	3 3 10 W
Maenclochog Steeple -	51 54 45	4 46 11 W	Nether Broughton Steeple -	52 49 48	0 57 49 W
MALVERN HILL -	52 6 18	2 19 47 W	Newark Steeple -	53 4 30	0 49 18 W
Mancha Hill -	51 47 50	4 11 9 W	Newbiggin Spire -	55 11 14	1 29 42 W
Manchester, St. Mary's Spire -	53 29 0	2 14 22 W	Newbury Steeple -	51 24 5	1 19 9 W
March Spire -	52 33 25	0 5 30 E	NEW INN HILL -	51 58 47	4 11 58 W
MARGAM DOWN -	51 55 11	3 41 28 W	NEWMARKET -	52 15 28	0 27 12 E
Mark Steeple -	51 13 37	2 52 39 W	NEWTON DOWN -	51 44 7	4 53 53 W
Mairos Steeple -	51 45 4	4 34 50 W	Newton Down Signal Staff	51 39 35	3 39 21 W
MARROS BEACON -	51 44 33	4 35 6 W	Newton, St. Cyrus Steeple -	50 46 18	3 34 40 W
Marston Hill, Windmill	54 57 50	1 23 10 W	Newton Summer House	50 56 14	2 36 50 W
Marston Moityne Steeple -	52 1 37	0 36 46 W	Newts Down -	50 53 31	3 26 58 W
Mary Ansleigh Steeple	50 59 3	3 45 38 W	Nine Standards -	54 27 21	2 15 57 W
Mary St. Hill, Steeple	51 30 11	3 29 23 W	Nipple Rock -	51 43 16	4 52 50 W
MAY HILL -	51 53 20	2 26 1 W	Norham Castle -	51 43 29	2 8 30 W
May, Isle of, Lighthouse	56 11 22	2 32 47 W	Northam Steeple -	51 2 26	4 11 57 W
Melbourne Steeple -	52 5 10	0 1 11 E	North Berwick Law, Staff -	56 3 8	2 42 11 W
Meldreth Steeple -	52 4 50	0 0 50 E	North-Hill Steeple -	52 6 18	0 19 18 W
Melksham Steeple -	51 22 22	2 7 58 W	North Meak Spire -	53 39 41	2 57 3 W
Merrington Steeple -	54 40 45	1 35 13 W	NORTH MOLTON RIDGE -	51 4 44	3 43 47 W
Michael's St. Mount	50 7 2	5 27 33 W	North Petherton Steeple	51 5 34	3 0 14 W
Michael's St. Penkeville Steeple -	50 14 28	4 59 17 W	North Tawton Steeple	50 48 0	3 52 58 W
Mildenhall Steeple -	52 21 19	0 31 56 E	NORTHY -	52 22 38	0 8 3 E
Millford Steeple -	51 42 43	5 20 13 W	Norton Fitzwarren	51 1 41	3 8 8 W
Milford, Lord's, Summer House -	51 47 9	4 51 30 W	Nottingham Steeple -	52 57 8	1 8 14 W
Milton Bryant Steeple	51 58 1	0 35 5 W	OGMOOR DOWN -	51 28 1	3 35 26 W
			Ola Law, Beacon Staff	55 39 42	1 40 57 W
			ORME'S HEAD (GREAT)	53 20 2	3 50 21 W

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Ormskirk Spire -	53 34	52 36	RADNOR FOREST	52 16	3 11 16 W
ORFIT HEIGHTS -	53 3	32 22	Ramsey Island, highest point -	51 51 43	19 36 W
ORWELL -	52 9	0 50	Ramsey Steeple -	52 27 57	6 9 W
Orwell Pole -	52 5	0 1	Redmile Spire -	52 54 44	48 42 W
Orwell Steeple -	52 8	0 28 W	Red Pike -	54 31 24	16 31 W
Ottery St. Mary -	50 45 13	16 8 W	Retford (East) Spire -	53 23 58	0 54 3 W
Over Broughton Steeple	52 49	58 55 W	RHIW MOUNTAIN -	52 50 0	4 36 48 W
Pains Hill Spire -	51 19	26 28 W	Rhuddlan Steeple -	53 17 30	27 24 W
Palk's Tower -	50 39	34 46 W	Rickmansworth Spire	51 38 12	27 55 W
Pancras Week Steeple	50 49	24 15 W	Ripon Church -	54 8 11	30 47 W
PARACOMBE -	51 10	50 49 W	Rivel Mountain -	2 58 33	4 24 9 W
Parkham Steeple -	50 58	18 51 W	RIVINGTON HILL -	53 37 51	2 30 21 W
Paul's St. Steeple -	50 5	31 37 W	Roch Castle -	1 50 59	5 2 32 W
Peel Castle	3	9 41 W	RODNEY'S PILLAR -	52 43 23	3 2 1 W
Peel Fell -	16	34 48 W	Romsey Steeple -	0 59 26	29 45 W
Penboir Steeple	0	21 23 W	Rosilly Barrow -	51 34 35	15 51 W
Penbree Steeple	41	48 16 W	Rossal Point, Landmark	53 55 18	2 20 W
Penbury Rock	54	13 45 W	ROYSTON -	52 2 20	3 7 W
Pencarn	0	2 51 W	Royston Steeple -	52 2 53	1 9 W
Pendennick Signal Staff	50 4	41 32 W	RUFFLAW -	55 13 16	45 13 W
PENDLE HILL -	53 52 11	2 17 21 W	RUMBLE MOOR -	53 54 16	49 9 W
PENGARN MOUNTAIN	52 40 42	4 1 1 W	Ruscombe Steeple -	51 28 49	50 48 W
Penmacn Mavr -	53 15 39	3 55 59 W	Saddle Back -	54 38 30	2 17 W
Pennigant Hill -	54 10 56	2 14 22 W	Salcombe Chapel -	50 14 22	45 15 W
Pen Selwood Steeple	1 4 55	2 20 26 W	Salisbury Spire -	51 3 56	47 24 W
Pen y Voel -	51 54 36	2 56 3 W	Sampford -	50 56 41	14 59 W
Penrith Beacon -	54 40 37	2 43 59 W	Sandon Steeple -	51 59 35	4 26 W
Pershore Steeple	52 6 39	2 4 12 W	Saterleigh Gazebo -	50 59 15	52 48 W
Peterborough Cathedral	52 35 40	0 14 45 W	SAYERS LAW -	55 51 1	39 35 W
Petrock Stowe Steeple	51 49	5 58 W	SCA FELL (LOWER TOP) -	54 27 2	3 12 45 W
Petrox, St. Steeple -	38 27	54 54 W	SCILLY BANK -	54 33 43	3 32 54 W
Pewsey Steeple -	20 18	1 45 34 W	Seaton Delaval Summer House -	55 5 2	1 28 42 W
Pillar (The) -	54 29 57	3 16 7 W	Secnd Steeple -	51 20 50	2 4 28 W
Pistle Down Telegraph	50 53 58	1 51 44 W	Selby Steeple -	53 47 7	1 3 42 W
Pittenweem Spire -	56 12 48	2 43 2 W	Sephton Spire -	53 30 19	2 57 36 W
PLUMSTONE DOWN	52 5	5 1 19 W	Shaftsbury, Trinity Steeple	51 0 24	2 11 25 W
Plungar Steeple -	53 57	0 51 11 W	Sherborne Steeple	56 50	2 30 26 W
PLYNLIMMON -	52 28 3	3 46 4 W	Sherf Hill, Beacon Staff	54 52 59	4 34 23 W
PONTOP PIKE -	54 52 19	1 45 35 W	Shields, North, Steeple	55 0 48	1 26 27 W
Portsmouth -	50 13 58	3 44 32 W	Shiplake Steeple -	51 29 56	0 53 27 W
Portsdown Telegraph	50 51 13	1 3 3 W	Shottesbrook Spire -	51 29 13	0 47 6 W
Portsmouth's, Lord, House -	51 13 50	1 21 50 W	Shrewsbury, St. Chad's Steeple -	42 28	2 44 53 W
Poulton Steeple -	53 50 54	2 58 51 W	Shuckburgh Steeple -	15 10	1 16 3 W
Prandergest Steeple -	51 48 28	4 56 40 W	SHUNKOR FELL -	22 21	2 13 31 W
PRECELLY TOP -	51 56 48	4 45 21 W	Sibertoft Steeple -	26 22	0 59 38 W
Prescot Spire -	53 25 45	2 47 44 W	SIMONSHILL -	17 5	1 57 16 W
Prestbury Steeple -	51 54 54	2 14 W			
Probus, St. Steeple -	50 17 34	4 56 W			
Puddington Steeple -	50 53	3 38 48 W			
Queensberry Hill -	55 17	3 34 47 W			

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SKIDDAW -	54 39 12	3 8 9 W	Thelbridge Steeple -	50 53 47	3 42 44 W
Small's Lighthouse -	51 43 18	5 58 34 W	Therfield Steeple -	52 0 57	0 3 20 W
SNEA FELL -	54 17 28	4 26 46 W	Thorne Falcon Steeple	51 0 38	3 0 43 W
SNOWDON -	53 4 9	4 3 38 W	Thorne Steeple -	53 36 45	0 56 8 W
Someisham Steeple -	52 23 46	0 0 0	Thorney Abbey -	52 38 39	0 6 29 W
South Molton Steeple	51 1 8	3 49 17 W	TILTON ON THE HILL	52 38 46	0 51 45 W
Southernness Point Land-			Tilton on the Hill Spire	52 38 40	0 53 53 W
mark -	54 52 30	3 34 53 W	Titterdieu Signal Staff	50 3 19	5 33 30 W
South Petherton -	50 56 54	2 47 54 W	Toot Hill Telegraph	50 57 56	1 27 6 W
Soutra Hill Pile -	55 51 1	2 45 6 W	Totness Steeple -	50 25 57	3 40 29 W
SPAN HEAD -	51 7 1	3 47 55 W	Town Hill Telegraph	50 55 24	1 19 38 W
Spreyton Steeple -	50 45 21	3 50 4 W	TRECASTLE BEACON	51 52 58	3 41 35 W
STAINCROSS HEIGHTS	53 55 32	1 30 14 W	Tre Carn Issa -	51 50 5	3 53 44 W
Stalling Down Signal			Treching Mountain -	51 53 25	3 52 31 W
Staff -	51 27 19	3 24 24 W	TREGARON DOWN	52 14 3	3 48 53 W
Standish Spire -	53 35 17	2 39 4 W	Tregonning Signal Staff	50 6 59	5 20 1 W
Stanmore Station -	51 37 17	0 20 38 W	TRELLEG BEACON -	51 44 42	2 41 51 W
Stanstead Monument	50 52 47	0 53 36 W	Trelleg Steeple -	51 44 47	2 42 53 W
Staple Hill -	50 56 43	3 4 16 W	Trowbridge Spire -	51 19 8	2 11 57 W
Staples, West, Light-			Trumpington Steeple	52 10 45	0 6 58 W
house -	55 37 11	1 38 51 W	Tuddington Steeple -	51 56 59	0 39 55 W
Staples, East, Light-			Twinell's St. Steeple -	51 38 24	4 50 44 W
house -	55 38 9	1 37 5 W	Twymbarlum Mountain	51 37 41	3 4 55 W
Staples, Building on the	55 37 8	1 38 54 W	Tynemouth Lighthouse	55 1 21	1 24 31 W
STATHERN POINT -	52 52 33	0 49 50 W	Uffculme Steeple -	50 54 15	3 19 16 W
Stathern Steeple -	52 52 17	0 50 55 W	Ugborough Spire -	50 23 13	3 50 53 W
Steeple Ashton -	51 18 49	2 7 39 W	Wakefield Spire -	53 41 2	1 29 24 W
Steinton Steeple -	51 43 51	4 59 50 W	Wallaton Cross -	50 19 27	3 41 30 W
Stow Hill -	52 21 53	2 59 31 W	Waller's Pleasure House	53 49 41	2 22 14 W
Stow, Building on Hill			Waltham Spire -	52 49 5	0 48 21 W
near -	55 34 50	2 53 24 W	Warboys Spire -	52 24 56	0 5 11 W
Stretham Steeple -	52 21 41	0 13 48 E	Warbstow -	50 41 17	4 32 5 W
Sturminster Steeple -	50 55 31	2 17 39 W	Wardour Castle -	51 2 32	2 5 45 W
Stutland Signal Staff	50 37 57	1 55 52 W	Wareham Steeple -	50 41 5	2 5 56 W
Sunderland Lighthouse	54 55 12	1 21 16 W	Warkleigh Steeple -	50 59 20	3 55 19 W
Sunderland Point Wind-			Warkworth Castle -	55 20 54	1 36 14 W
mill -	55 34 45	1 37 56 W	Warren Bank -	52 5 49	4 36 18 W
SUTTON ASHFIELD	53 0 52	1 12 58 W	Warren Spire -	51 38 20	4 58 13 W
Sutton Spire -	53 7 36	1 42 38 W	Warren Signal Staff -	50 53 17	2 50 4 W
Sutton Steeple -	52 24 14	0 8 6 E	Warrington Steeple -	53 23 30	2 33 11 W
Swaffham Spire -	52 15 35	0 18 39 E	WATER CRAG -	54 26 19	2 6 8 W
Swansea Castle -	51 37 13	3 55 32 W	Watford Spire -	51 39 16	0 23 36 W
SYMMOND'S HALL -	51 39 48	2 17 59 W	Wavertree Steeple -	53 23 43	2 54 17 W
Talliaris Pigeon House	51 55 54	3 57 26 W	WEAVER HILL -	53 0 55	1 51 10 W
TALBARN -	52 13 8	4 7 8 W	Wednesbury Spire -	52 33 23	2 0 44 W
Tamerton North Steeple	50 45 5	4 22 44 W	Welford Steeple -	52 25 5	1 3 13 W
Tame Steeple -	51 45 3	0 58 38 W	Wellington Steeple -	53 5 53	0 31 52 W
Taunton, St. Mary's			Wellington Steeple -	50 58 54	3 12 49 W
Steeple -	51 0 59	3 5 22 W	West Allington Steeple	50 16 55	3 46 45 W
Tenby Spire -	51 40 20	4 40 52 W	West Hatch Steeple -	50 59 5	3 0 30 W
Tewkesbury Steeple	51 59 27	2 9 7 W	West Knoyle Steeple	51 5 39	2 11 36 W

Names of stations and Objects.	Latitude.	Longitude from Greenwich.	Names of Stations and Objects.	Latitude.	Longitude from Greenwich.
West Mouse -	3 25 6	4 32 13 W	Winwick Spire -	53 25 53	35 16 W
West Morchard Steeple -	0 51 15	3 43 52 W	Wisbich Steeple -	52 41 23	10 15 E
Westerton Folly -	4 40 32	1 37 16 W	Wisp Hill -	55 17 13	57 22 W
Whatley Spire -	1 13 39	2 22 23 W	Witheridge -	50 55 6	41 27 W
Whatton Spire -	2 57 1	0 53 15 W	WITTLE HILL -	53 40 4	15 26 W
WHERNSIDE (Great in Kettlewell Dale) -	4 9 44	1 59 24 W	Wiveliscombe Steeple -	51 2 30	3 17 52 W
WHERNSIDE (in Ingleton Fells) -	4 13 45	2 23 35 W	Woburn Abbey -	51 54 47	35 42 W
Whin Fell -	5 21 3	3 15 4 W	Woking Monument -	51 18 30	31 55 W
Whitchurch Steeple -	51 52 5	0 49 49 W	Woodbury Signal Staff -	50 37 22	20 17 W
Whitehaven, Windmill near -	54 32 50	3 34 56 W	Woolavington Steeple -	51 10 16	55 24 W
Whittlesea Spire -	52 34 36	0 7 46 W	Woolford Lodge -	50 49 1	12 15 W
Wickham Lodge Telegraph -	50 54 2	1 9 1 W	Woolverhampton Spire -	52 34 54	7 10 W
Widworthy -	50 47	3 6 10 W	WORDESLOW HILL -	54 51 3	25 6 W
Willen Steeple -	52 2 1	0 39 57 W	Workington Chapel -	54 38 34	3 33 30 W
WILTON BEACON -	53 59 54	0 45 29 W	Worm's Head -	33 56	18 56 W
Wimborne Steeple -	50 47 5	1 58 52 W	WREKIN (THE) -	52 40 11	31 30 W
Wincanton Steeple -	51 3 2	2 24 16 W	Yartcombe -	52 22	3 4 34 W
Winchester Cathedral -	51 3 4	1 18 26 W	Yelling Spire -	52 15 16	0 9 19 W
Winckley Steeple -	50 51 2	3 55 48 W	Yeovil Steeple -	50 56 34	37 W
Wing Steeple -	51 53 4	0 43 3 W	Yetminster Steeple -	50 53 40	34 6 W
Wingrave Steeple -	51 51 4	0 44 8 W	YNALIOG MOUNTAIN -	52 48 41	43 30 W
Winslow Steeple -	51 56 34	0 52 40 W	Ynys Gadarn -	53 22 9	14 15 W
			Ynystraeth Bychan -	53 21 32	12 35 W
			York Minster -	53 57 48	4 34 W
			York Spire -	53 57 30	4 28 W
			Zeal Monachorum -	50 49	48 23 W

## ERRATA.

- Page* 89, *Triangle* 17, Sides and Angles inverted.  
— 135, *Triangle* 213, for 148740, 1 read 168740, 1.  
— 160, and 161, for Puncheston, read Castle Baith.  
— 170 *Triangle* 16, put 58 3 4 a line lower.  
— 171, *Triangle* 15, for 37030, read 57030.  
— 174, *Triangle* 14, invert the sides.  
— 175, *Triangle* 12, for 44769, read 41799.  
— 177, *Triangle* 17, for 50136, read 50178.  
— 178, *Triangle* 7, for 255855 read 254680, and *Triangle* 14, for 154994, read 158603  
— 189, for Plate 2, read Plates 2 and 3.  
— 283, *Triangle* 7, for 46632, read 46525.  
— 305, line 10, for Dundry, read Dunkery; also Dundry Beacon, 790.  
— 339, line 23, for 14129 S, read 14129 N.  
— 346, line 4, for 118350, read 11835.  
— 348, line 21, for 44466 W, read 44466 E.  
— 360, line 4, for 883329, read 88329.  
In the pagination of Signature T 1, for 349, &c., read 321, &c.









